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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 813
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 1663
<212> DNA
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<213> Homo sapiens

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<211> 1331
<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 820
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
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<211> 3246
<212> DNA
<213> Homo sapiens

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<211> 405
<212> DNA
<213> Homo sapiens

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<211> 1802
<212> DNA
<213> Homo sapiens

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<211> 1106
<212> DNA
<213> Homo sapiens

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<211> 1963
<212> DNA
<213> Homo sapiens

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<211> 1612
<212> DNA
<213> Homo sapiens

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<211> 1124
<212> DNA
<213> Homo sapiens

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<211> 479
<212> DNA
<213> Homo sapiens

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<210> 590
<211> 3015
<212> DNA
<213> Homo sapiens

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<211> 859
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)...(859)
<223> n = a,t,c or g

<400> 601

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<211> 2047
<212> DNA
<213> Homo sapiens

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<210> 603
<211> 1927
<212> DNA
<213> Homo sapiens

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aaaaaaa 1927

<210> 604
<211> 630
<212> DNA
<213> Homo sapiens

<400> 604

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<210> 605
<211> 783
<212> DNA
<213> Homo sapiens

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aag 783

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<211> 2513
<212> DNA
<213> Homo sapiens

<400> 606
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<210> 607
<211> 768
<212> DNA
<213> Homo sapiens

<400> 607
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<210> 608
<211> 698
<212> DNA
<213> Homo sapiens

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<210> 609
<211> 1256
<212> DNA
<213> Homo sapiens

<400> 609
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<210> 610
<211> 417
<212> DNA
<213> Homo sapiens

<400> 610
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<210> 611
<211> 886
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(886)
<223> n = a,t,c or g

<400> 611
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<210> 612
<211> 597
<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
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<211> 1210
<212> DNA
<213> Homo sapiens

<400> 640

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<211> 1108
<212> DNA
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<211> 2418
<212> DNA
<213> Homo sapiens

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<211> 1166
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

<400> 645

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<212> DNA
<213> Homo sapiens

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<210> 647
<211> 1498
<212> DNA
<213> Homo sapiens

<400> 647
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<211> 1013
<212> DNA
<213> Homo sapiens

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<211> 1504
<212> DNA
<213> Homo sapiens

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<211> 2231
<212> DNA
<213> Homo sapiens

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<223> n = a,t,c or g

<400> 650

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<223> n = a,t,c or g

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<210> 653
<211> 1014
<212> DNA
<213> Homo sapiens

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<211> 1725
<212> DNA

<213> Homo sapiens

<400> 654

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<210> 655
<211> 748
<212> DNA
<213> Homo sapiens

<400> 655

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<210> 656
<211> 977
<212> DNA
<213> Homo sapiens

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atgccaacac cagctgtatc agctcctcag ccagctcctc tctagagaca ccagtcagat 240
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caaaaaaaaa aaacatt 977

<210> 657
<211> 746
<212> DNA
<213> Homo sapiens

<400> 657
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gagatcggca ccgagatcag ccgcaagatc cggagtgcca ttaaggggaa attacaagaa 180
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aaaagtcagg accaaatgac agaggatctg tccctgtttc tagggaacaa cacaattcga 300
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acacttacat atggttcttc tcgccc 746

<210> 658
<211> 559
<212> DNA
<213> Homo sapiens

<400> 658
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gggcagcgga agcgccccа 559

<210> 659
<211> 538
<212> DNA
<213> Homo sapiens

<400> 659
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acaggacaga gacagctgcc cgggaggatg ggagaacaga aagagggagg aaacgccgag 180
cactgacctg ggggagggga gtaaagagaa gtgaaggggg attggaaggg aactggagaa 240
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aaggcagaga aagcaaaagca agaccagact cctcatccgg taacactgtg tcaggtcatt 360
gccctcccac cccgccccca accccataac tgaaaacaag taggaacctg gataaaatag 420
tcttaacaat ttttttttg agacggagtc ttgctgtgtt gcccaggctg gagtgcagtg 480
gcgcgatctc ggctcactgc aggctccgcc tcccgggttt aagcggttct cctgccta 538

<210> 660
<211> 735
<212> DNA
<213> Homo sapiens

<400> 660
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accccacgag gcgctcagca cccagggaag gcgcgtgtgt ccccgatgct ggctcctccc 180
tgagccccga cggctctcga ggttctgagc ctgtggcctg cacagggaac ttcctctccg 240

actgcattta tgcctctgtg gatgtgaagg ctatttctag aaatctcttc ctttgcagaa 300
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tccacccaga acaagcggga gcctgtgtca ggaaagcatg tcagagcaga gctgccagat 480
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<210> 661
<211> 978
<212> DNA
<213> Homo sapiens

<400> 661
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<210> 662
<211> 1118
<212> DNA
<213> Homo sapiens

<400> 662
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aggcagcagc agtgtttaga gggggagtaa aaaaaaaa 1118

<210> 663
<211> 556
<212> DNA
<213> Homo sapiens

<400> 663
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caacaacaaa aaaaaa 556

<210> 664
<211> 373
<212> DNA
<213> Homo sapiens

<400> 664
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cctcgatctt catcgcgtgc gttagtccgt ctcgtcgtct tgcttcgttt cctcctctct 360
cgtcatcctt ccc 373

<210> 665

<211> 411
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(411)
<223> n = a,t,c or g

<400> 665
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<210> 666
<211> 333
<212> DNA
<213> Homo sapiens

<400> 666
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taagcagctg tatgccatga aggtattgac gag 333

<210> 667
<211> 1991
<212> DNA
<213> Homo sapiens

<400> 667
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gaaaaaaaaa a 1991

<210> 668
<211> 1156
<212> DNA
<213> Homo sapiens

<400> 668
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<210> 669
<211> 539
<212> DNA
<213> Homo sapiens

<400> 669
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<210> 670
<211> 682
<212> DNA
<213> Homo sapiens

<400> 670
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ccccctggct ggaagtgccc tt 682

<210> 671
<211> 536
<212> DNA
<213> Homo sapiens

<400> 671

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<210> 672
<211> 1038
<212> DNA
<213> Homo sapiens

<400> 672
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<210> 673
<211> 676
<212> DNA
<213> Homo sapiens

<400> 673
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ccgcggcgat ctcgatcccg ctgacccgaa tcctggagtc agaggtttcc tatccccctc 240
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ctagtggctg cccgggatca cgttttctcc ttcgatcttc aagccgaaga agaaggggag 600
gggctggtgc ccaacaagta tctaacatgg agaagccaag atgtggagaa ctgtgctgta 660
cggtgaaagc tgacgg 676

<210> 674
<211> 418
<212> DNA
<213> Homo sapiens

<400> 674
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gtcctcagac caaccagccc aaggaacatc tcaccaattt caaatcaggt aagcggtctt 180
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aaactccagc gctggtcact ccagacagtc ttccgttggt gtttaatcac tgtggggatg 360
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<210> 675
<211> 1423
<212> DNA
<213> Homo sapiens

<400> 675
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ccattgaaac cagcaaaagg acttatgagt tacaggataa ttacagattt tccatctttg 180
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tcatggagag acacactttc tcagaagttt ggatcctcag atcacttgga gaaactattt 360
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<210> 676
<211> 621
<212> DNA
<213> Homo sapiens

<400> 676
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tgcctcagcc tcctgagtag ctgggattac agtaaataca atcaaggggc atcttaaatt 180
tttgctggaa gtggagtcat gagactaaag atatctcttt taaaagaacc aaagcatcaa 240
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caccacatag tgaagtggaa cttgttaacc agtgaaacaa ctcaaatagt aaagcttcct 360
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acccatgcag aaagctttgt cctcacaagt tctgatggta aatttcatct gatttccaag 480
ttaggaagag tggaaaaaag tgtagaagct cactgtggag cagtacttgc aggaagatgg 540
aattatgaag gaacagcatt agttacagtt ggagaagatg gacaaatata aatttggtca 600
aagactggga tgcttatatc t 621

<210> 677
<211> 1258
<212> DNA
<213> Homo sapiens

<400> 677
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acttcgcgga gcagttccgc tcctactcag agagcgagaa gcaatggaag gcccgcatgg 180
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tcacattttc atcatcagct acaggattag aaaggaggct gggatgaatg tgacatagac 480
cacagcagct ctcttaagac tcctggtatt accaacataa agaggcaggt ggaatgagaa 540
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gctcatattt tcagggtttt ttgttttttg ttttgttttt ttgagacaga gtcttgctct 840
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<210> 678
<211> 1289
<212> DNA
<213> Homo sapiens

<220> .
<221> misc_feature
<222> (1)...(1289)
<223> n = a,t,c or g

<400> 678
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atgcccgggc gctgggttca ggggctttcc gccgctctgg gttcacagct ggacgtcggg 180
agtgctagtt tggagtacgc catttgagag taggcgtgag aagttgctct gtgtgctgag 240
cgttctaaag gaaggcgtcc gttggccttc gtacccgtct tgagtgaggt gacgagtgtt 300
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gggagagatc caggaagtgg tcgcggagc 1289

<210> 679
<211> 539
<212> DNA
<213> Homo sapiens

<400> 679
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ccgcctccca ggctcaagcc attctcctgc ctcagcctcc ggagtagctg ggactacagg 120
catgcaccac cacacccggc taatttttg tatttttagt agagacaggg tttctccatg 180
ttggtcaggc tggtcttgaa ctctggacct caggtgatcc gcccgccttg gcctcccaaa 240
ttactgggat tacaggcgtg agccactgcg cccggcctct ttaatttctt ttaattcctg 300
ttccaatgca gagaagaaca taagaagaaa aacccagaag tccctgtcaa ttttgcagaa 360
ttttccaaga aatgctctgg gaggtggaag acaatgtcca gtaaagagaa atttaaattt 420

ggtgaaatgg caaaggcgga tgaagtgtgc tatgatcggg aaatgaagga ttatggacca 480
gctaagggag gcaagaagaa ggatcctaat gcccccaaaa ggccaccatc tggattctt 539

<210> 680
<211> 349
<212> DNA
<213> Homo sapiens

<400> 680
ttagaagtga gttaaatttt cacattccca agggtacttt tgtctcgggt tgttgaatat 60
attttaaagt gtttataata atcacttcaa aatatttagg taattaactg taaattatgt 120
tttggtattc tccagggaca gtggccttag agctattgag aatttgatgc aaaagaaggg 180
gaaatttgat tacatactgt tagagaccac tggattagca gaccctggta agaagtgaga 240
ttattaataa ccagaatata gttctgtgat atattgtaaa tagatgtatt agaggaatat 300
ctaaaatgag gattaaagct tttgttagta ttaaaccaaa aacttttt 349

<210> 681
<211> 329
<212> DNA
<213> Homo sapiens

<400> 681
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tgtttctctt cttcaggccc tttcggggtg taggcactga gagtggatcc gaaagcggaa 120
gttccaaagc caaggagcct agaacgccct caagcagcta cgggaccgcc caataccgac 180
gctggccaat agcccaggag tataaacact gcaccgcgca caatgacaca ggcactctct 240
gctccgagct gagagaacca tggaggagac cgcagtagac agagccactg aactcatgac 300
aacgtgaagc gaactagaaa gtaatactc 329

<210> 682
<211> 574
<212> DNA
<213> Homo sapiens

<400> 682
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tggcttgtct ggagtcacat gtacttaggt gacaatttac agaaagtcat ctctgcagct 120
tgatgggcga caacccttttt caaccaaaaa gtaattcaaa aatggcagaa ctgtttatgg 180
aatgtgaaga agaggagctg gaaccatggc agaagaaagt aaaagaagtt gaggatgacg 240
atgatgatga gccaatcttt gttggcgaga tatcaagttc aaaaccagca atttcaaata 300

ttttgaacag agttaacccc agctcatatt caaggggact aaagaatggt gcactcagtc 360
gaggtattac tgctgcattc aagcctacaa gtcaacacta cacgaatcca acatcaaatc 420
cagtgcctgc ctcaccaata aattttcatc ctgagtctag atcttcagat agttctgtta 480
ttggtcagcc tttttctaaa cctgtaagtg tttctaaaac tatacggcca gctcagggat 540
ccattggatg ttgtttatca atatcaacag tacc 574

<210> 683
<211> 627
<212> DNA
<213> Homo sapiens

<400> 683
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tgtttgcatt ctaccatgat aaagatggaa atcctctcac ttcaagattt gcagatggcc 120
tcccaccttt taattatagt ctgggattat atcaatggag tgataaagta gttcgaaaag 180
tggagagatt atgggatgtt cgagataata agatagttcg tcacactgtg tatctcctgg 240
taacgcctcg tgttgttgag gaagcacgaa aacattttga ttgtccagtt ctagagggaa 300
tggaacttga aaatcaaggt ggtgtgggca ctgagctcaa ccattgggaa aaaaggttat 360
tagagaatga agcgatgact ggttctcaca ctcagaatcg agtactctct cgaatcactc 420
tggcattaat ggaggacact gggagacaga tgctgagccc ttactgtgac acgctcagaa 480
gtaacccact gcagctaact tgcagacagg accagagagc agttgccgtg gtgtaatttg 540
cagaagttcc ctaagccttt accacaggaa taccagtact ttgatgaact cagtggaata 600
cctgcagaag atttgcctta ttatggg 627

<210> 684
<211> 1271
<212> DNA
<213> Homo sapiens

<400> 684
gcggcgcgcc gccgcagaca gctggtgtcc cgccggagaa cggccgagat atccccgccg 60
gcggaggagc agccccagcg ccaggcctcc cgacgtcccc gggcagcagc ccaaggccgc 120
gaagtccccg tctccagttc agggcaagaa gagtccgcga ctcctatgca tagaaaaagt 180
aacaactgat aaagatccca aggaagaaaa agaggaagaa gacgattctg ccctccctca 240
ggaagtttcc attgctgcat ctagacctag ccggggctgg cgtagtagta ggacatctgt 300
ttctcgccat cgtgatacag agaacacccg aagctctcgg tccaagaccg gttcattgca 360
gctcatttgc aagtcagaac caaatacaga ccaacttgat tatgatgttg gagaagagca 420
tcagtctcca ggtggcatta gtagtgaaga ggaagaggag gaggaagaag agatgttaat 480
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gaaggaaatt aaagtggaag tagaggtgga ggtgaaagaa gaggagaatg aaattagaga 660
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acccaaaagg agaaaaaagc ctccaatcca gtatgtccgt tgtgagatgg aaggatgtgg 780
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gaagaaacat gatgcagact ccttctacca gttttcttgc aatatctgtg gcaaaaaatt 1140
tgagaagaag gacagcgtag tggcacacaa ggcaaaaagc caccctgagg tgctgattgc 1200
agaagctctg gctgccaatg caggcgccct catcaccagc acagatatct tgggcactaa 1260
cccagagtcc c 1271

<210> 685
<211> 685
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(685)
<223> n = a,t,c or g

<400> 685
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tgcgaaccgg cttgcagaga gccttctggc tttgagccaa caggaagaac tagcggattt 120
gccaaaagac tacctcttga gtgagagtga agatgagggg gacaatgatg gagagagaaa 180
gcatcaaaag cttctggaag caatcagttc ccttgatgga aagaataggc ggaaattggc 240
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tgtgaaaaag caactgagta gagtcaaatc aaagaagaca gtggagttac ctctgaacaa 420
agaagagatt gaacggatcc acagagaagt agcattcaat aaaaccgcac aagtcctctc 480
caaatgggac cctgtcgtcc tgaagaaccg gcaggcagag cagctggttn ttcccctgga 540
gaaagaggag ccagccattg ctcccattga acatgtgctc agtggctgga aaggcagaac 600
tcccctggag cangaaattn tcaacctnct ncatangaac aagcagncag tgacagaccc 660
tttactgacc cctgtggaaa ggcct 685

<210> 686
<211> 962
<212> DNA
<213> Homo sapiens

<400> 686
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tgacataact ggagccagtg cagtgccatg aagaactacg agattagcct ggatattaac 120
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caggaaaaga actgaaagtt ttgagttacc ctgctcatga acaaattgca ctgctggttc 600
cagagaaact tacgcctcac ctgaaatact atgtggctat ggacttccaa gccaagttag 660
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ttcttgcagt aacagatttt gagccaaccc aggcacgcat ggctttccct tgctttgatg 780

aaccgttgtt caaagccaac ttttcaatca agatacgaag agagagcagg catattgcac 840
tatccaacat gccaaaggtt aagacaattg aacttgaagg aggtcttttg gaagatcact 900
ttgaaactac tgtaaaaatg agtacatacc ttgtagccta catagtttgt gatttccact 960
ct 962

<210> 687
<211> 676
<212> DNA
<213> Homo sapiens

<400> 687
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agcagggaaa aagccagtgc cccagcggaa gcacagctca gagctggtct gccatggaca 120
tcctggtccc actcctgcag ctgctggtgc tgcttcttac cctgcccctg cacctcatgg 180
ctctgctggg ctgctggcag cccctgtgca aaagctactt cccctacctg atggccgtgc 240
tgactcccaa gagcaaccgc aagatggaga gcaagaaacg ggagctcttc agccagataa 300
aggggcttac aggagcctcc gggaaagtgg ccctactgga gctgggctgc ggaaccggag 360
ccaactttca gttctaccca ccgggctgca gggtcacctg cctagaccca aatccccact 420
ttgagaagtt cctgacaaag agcatggctg agaacaggca cctccaatat gagcggtttg 480
tggtggctcc tggagaggac atgagacagc tggctgatgg ctccatggat gtggtggtct 540
gcactctggt gctgtgctct gtgcagagcc caaggaaggt cctgcaggag gtccggagag 600
tactgagacc gggaggtgtg ctctttttct gggagcatgt ggcagaacca tatggaagct 660
gggccttcat gtggca 676

<210> 688
<211> 639
<212> DNA
<213> Homo sapiens

<400> 688
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<210> 689
<211> 116

<212> DNA
<213> Homo sapiens

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<210> 690
<211> 509
<212> DNA
<213> Homo sapiens

<400> 690
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<210> 691
<211> 1362
<212> DNA
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<400> 691
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<210> 692
<211> 503
<212> DNA
<213> Homo sapiens

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gctacatgaa ggccatggga aaa 503

<210> 693
<211> 1671
<212> DNA
<213> Homo sapiens

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<210> 694
<211> 898
<212> DNA
<213> Homo sapiens

<220>
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<222> (1)...(898)
<223> n = a,t,c or g

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ccttggccat ggcagcttgg ttgggacagc cgggccaagg gaaaaaaagg tgcaaaagtc 180
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ctgtaggggg ganatgcncc gcctagaggt tcgatcggtg gaaagacagc cgggcccc 898

<210> 695
<211> 630
<212> DNA
<213> Homo sapiens

<400> 695
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gcgcccgaca ggtatattga aaagtctgat tcagttacaa tcagtgtatg gaatcacaag 120
aagatccata agaaacaagg tgctggattt ctccgttgtg ttcgtctttt tccagtgcca 180

tcaaccacct caaagacact ggttatcaga ggttggattt atgcaaactt gggccaaagg 240
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acgagagtga tgttagcagc gcactaagtt acatcttgcc ttatctctca ctgagaaatc 480
taggtgcaga atcaatattg ttaccgttca ctgaacagct attttcaaat gtacaagatg 540
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taggtaacaa atttaaaaac aaaatatttg 630

<210> 696
<211> 879
<212> DNA
<213> Homo sapiens

<400> 696
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ccaagaagct tgagagaaga aaaatttcag aaaaattgtc tcaatttgac tagaatatca 180
atgaaccagg aaaactgaag caccttccct aaagaaaact tgggtataca attactccac 240
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cactggatgt tgctgaagaa gaaatcatag acgatgatga tgatgacatc acccttacag 600
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atgggattcc tgaagtgatg gaaacacagc aggtgcaaga aaaatatgca gactcaccgg 840
gagcctcatc accagaacag cctaagagga aaaaaaaaa 879

<210> 697
<211> 719
<212> DNA
<213> Homo sapiens

<400> 697
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tgcgttcgct acgaggattg agcgtctcca cccatcttct gtgcttcacc atctacataa 180
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acaagatcca tgtgtggatg aaatgttagg aaaagggagg cccagtggaa gtgggctcac 660

acctgtaatc ccagtaggct agggaggttg aagcaagagg atggcttgag tctagaagt 719

<210> 698
<211> 420
<212> DNA
<213> Homo sapiens

<400> 698
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catgtctgtg gtaccgccca atcgctcgca gaccggctgg ccccgggggg tcactcagtt 180
cggcaacaag tacatccagc agacgaagcc cctcaccctg gagcgcacca tcaacctgta 240
agtgcggcgc ggccttggcg ggcatttctc tcgtgaaagc tcctatagac tctccgacgc 300
gcccccggct tttcggcgcg cttcacgcct ctgcacctcc ccgcctccaa ctcccgctgg 360
cggatgcgcg ccttcctccc tctctcaggc ccctttctca tcctccagcc tccaggattc 420

<210> 699
<211> 422
<212> DNA
<213> Homo sapiens

<400> 699
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cttgaagaag ctctggaagc aggaggttgt gatcttgaaa cgttgagaaa tataattcaa 120
ggaagaccgc tgcctgctga tctgagggcc aaagtttgga agattgctct gaatgttgca 180
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gaattacttt tggatattga atctgtaatt acctttttatt gtaaatcacg taacattaaa 360
tatagcacat cccttagctg gatacatcta ctgaaaccat tggtgcatct tcaactgcca 420
cg 422

<210> 700
<211> 412
<212> DNA
<213> Homo sapiens

<400> 700
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gaactgaggt gtccaacaca tgagtgaggc cttcctggat ctctagctct cgtcaagcct 120
tcccaacacc acgaggaaca aaaatgagcc atccaaatga gctttaccca aattcctgac 180

ccacggtgtc aagagcaatg aaagggttgt cgtttggctc tttccgccat cttttcgtgc 240
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aagaagaggc aaaccccagg ttcttattag gctgtgctcc aaaatcatca tctggtttct 360
cactgtaatg gtgaagtatg gttacattgg caaatttgaa cccacgcgtc cg 412

<210> 701
<211> 977
<212> DNA
<213> Homo sapiens

<400> 701
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gatatccgat ttgctac 977

<210> 702
<211> 406
<212> DNA
<213> Homo sapiens

<400> 702
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gccaaaagga aggagtgtat agagtagccg accaggttaa aaaaga 406

<210> 703

<211> 987
<212> DNA
<213> Homo sapiens

<400> 703
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tcaagtgtcg tatataggga acaagtattg atgttcaata tgattcaaac tattactgtt 180
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ggggagttgg gaaaataaat atttgta 987

<210> 704
<211> 473
<212> DNA
<213> Homo sapiens

<400> 704
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agagacattt gagcagaaat ccaagggtgg agagaccatg taaaagcagt aaaggtaata 420
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<210> 705
<211> 435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(435)
<223> n = a,t,c or g

<400> 705
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tctaccaact actgaaagga aaagctggtg ctggggagcc ctccacacca ctgactgatg 120
aatttcagca cgtcctggca cactgggctg tgggaggtct gtgagcaaat ggaagaacat 180
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catctgcctt cctgtaatcc cacccatctt tntagtgtgt atgtgggttt tttgtttgtt 300
ttgagacaaa gtcttgcttt gtcgcccagg ctggagtgca gtggcacaat ctcagctcac 360
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attataggcg cgtgc 435

<210> 706
<211> 894
<212> DNA
<213> Homo sapiens

<400> 706
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caccctgggg gatggtgagg ctgtgggtgc cgacagcggc accagcagcg ctgtctccct 300
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ggatatgtgt gtgtatgtgc gtgtacagac acacaaacct gccatataaa gtggtagttt 480
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ggtctggaag ctttgtggtc ctgtggtggg agctcagcta cagctgtcct accacatgtg 660
taaagaggaa ggaatcttac agattacaca tgctgtcgtg gacgatctcc gtgtccagtt 720
cattcttttt tctggagacg gagtctcgct cttgtcgccc agggtggaat gcagtggcac 780
gatctcagct cactgcctcc tctgtctccc gggttcaagc gattctactg cacgcagcct 840
cctgagtagc tgggattaca ggcgcccgcc accacgcctg ggcaacagag tgag 894

<210> 707
<211> 410
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(410)
<223> n = a,t,c or g

<400> 707
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gagacacaat gcaagctgta gtgcccttga acaagatgac agccatctca ccagaacctc 180
aaactctggc ctcgactgaa caaaatgagg tcccaagagt ggttacttct ggggaacaag 240
aagctatttt aagaggaaat gctgctgatg cagagtcttt cagacagagg tttaggtggt 300
tttgttactc agaagtagct ggacccagga aagctctgag tcaactctgg gagctctgca 360
atcagtggct gagaccagac attcacacga aagaancaga ttttagagct 410

<210> 708
<211> 650
<212> DNA
<213> Homo sapiens

<400> 708
gccgatttgc ctgttctcac gccccaccct cagacctagc cggagcaaag tttcacttat 60
agaagggaga ggagcgaaca tggcagcgcg ttggcggttt tggtgtgtct ctgtgaccat 120
ggtggtggcg ctgctcatcg tttgcgacgt tccctcagcc tctgcccaaa gaaagaagga 180
gatggtgtta tctgaaaagg ttagtcagct gatggaatgg actaacaaaa gacctgtaat 240
aagaatgaat ggagacaagt tccgtcgcct tgtgaaagcc ccaccgagaa attactccgt 300
tatcgtcatg ttcactgctc tccaactgca tagacagtgt gtcgtttgca agtatgaact 360
ccaactacgc tttaaaatta aataactcat ataacgttaa ccatttctca atcccagaag 420
ggccaagtta gtgcagtagg tacttaaata atgtgtatac cttactcagg atgtctatgg 480
tagcaatact actgctcttt tatagtcaat tcttgattat ccgtatcagt gggggaagca 540
tggataaata attgtggtag ccatcataaa agtaacttaa agatcaaaca gtcatcttat 600
aaattagtat caacttggcg gggcatgggg gctcatgcct gtaatccccg 650

<210> 709
<211> 534
<212> DNA
<213> Homo sapiens

<400> 709
tttcgtggcg aacgaggccc cacctctgcc gggagcggga cgagcgcgca ggcgcagtct 60
ccccaggttg tagacgctgc ggcccggccc ggcgggtaaa taacagatgc gggtgaaaga 120
tccaactaaa gctttacctg agaaagccaa aagaagtaaa aggcctactg tacctcatga 180
tgaagactct tcagatgata ttgctgtagg tttaacttgc caacatgtaa gtcatgctat 240
cagcgtgaat catgtaaaga gagcaatagc tgagaatctg tggtcagttt gctcagaatg 300
tttaaaagaa agaagattct atgatgggca gctagtactt acttctgata tttggttgtg 360
cctcaagtgt ggcttccagg gatgtggtaa aaactcagaa agccaacatt cattgaagca 420
ctttaagagt tccagaacag agccccattg tattataatt aatctgagca catggattat 480
atggtggtat gaatgggatg aaaaaatttt caccccttg aataaaaaag gttg 534

<210> 710
<211> 478
<212> DNA

<213> Homo sapiens

<400> 710
gattgagacc ctattcgaga ccatagtcca tgtggtggaa ttctgatgtc tcaactccgg 60
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ggagcgtgga gaggagagac agggtgaagg tggcggctgg ctttctggaa gcaggtggcc 180
tttggtgcgg tcagcattcg tgccagcccc ctcttctctg atcctctcca tgtgtctctc 240
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cggggccttc ctgtccggaa ccttcatagc caccgtcggc atagacttca gggtgaggtg 420
gctgcaggca cttgcttcca gcagagagcc agggctgtgg ctcaggcatg gggggGtt 478

<210> 711
<211> 585
<212> DNA
<213> Homo sapiens

<400> 711
cttctacccc cggagctcag ctgatcttcc cttccagact acgaggtgtg aatttcaaac 60
ttccgtaatg gagttagccc acagtttatt gctaaatgaa gaagctttgg ctcaaatcac 120
cgaagcaaaa agaccagttt tcatctttga atggttgcga tttcttgata aagtcttggt 180
tgctgccaac aaggtatggt attgctcttt tttcccagtt gcattaacgt gaagagatta 240
tgtggtcatg attcttaaga aaacacatgt tatgttttgg aaggtttatg ggtcacttat 300
ggaacttgag agtattacac gaatgggaaa tttagtggca aaactcaaac ctcgtttaaa 360
tccagctcat tgcctatctt ctttatgttt gtacctgggc agctcattgt aactggagaa 420
aaacatggct atatgactgg tgtcacttta aatttatcat cgtcacccgt tgcaagtgat 480
ctctctatgc tgcctaacaa tcccagtgtc ttcacttatc tctttgagga gtcaataata 540
ggctcttttt tttttaatct gttttttctt cctgcatagc cttgt 585

<210> 712
<211> 391
<212> DNA
<213> Homo sapiens

<400> 712
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ttgcgttcca ccatgattac tttctccttc agcgaatagg ctaaatgaat atgaaacaga 120
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tgaaaagaga gagcttattg gaatggggcc tctcaatact tctaggactg tgtattgctc 240
tgttttccag ttccatgaga aatgtccagt ttcctggaat ggctcctcag aatctgggaa 300
gggtagataa atttaatagc tcttctttaa tggttgtgta tacaccaata tctaatttaa 360
cccagcagat aatgaataaa acagcacttg c 391

<210> 713
<211> 524
<212> DNA
<213> Homo sapiens

<400> 713
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gaccctccta gtgcacaact tggccgggct cactgggctc ctgcaccact gcctgtcagg 120
tccgctgcca gccccaagcc ccccaccagc catgagctcc tccagaaagg accacctcgg 180
cgccagcagc tcagagcccc tcccggtcat cattgtgggt aacggccccc ctggtatctg 240
cctgtcctac ctgctctccg gctacacacc ctacacgaag ccagatgcca tccacccaca 300
ccccctgctg cagaggaagc tcaccgaggc cccgggggtc tccatcctgg accaggacct 360
ggactacctg tccgaaggcc tcgaaggccg atcccaaagc cccgtggccc tgctctttga 420
tgcccttcta cgcccagaca cagactttgg gggaaacatg aagtcggtcc tcacctggaa 480
gcaccggaag gagcacgcca tcccccacgt ggttctgggc cgga 524

<210> 714
<211> 2468
<212> DNA
<213> Homo sapiens

<400> 714
gaatcgacgc acgcgtgcgc agcgctgcca gcgtggaagg agctgcgggg cgcgggagga 60
ggaagtagag cccgggaccg ccaggccacc accggccgcc tcagccatgg acgcgtccct 120
ggagaagata gcagacccca cgttagctga aatgggaaaa aacttgaagg aggcagtgaa 180
gatgctggag gacagtcaga gaagaacaga agaggaaaat ggaaagaagc tcatatccgg 240
agatattcca ggcccactcc agggcagtgg gcaagatatg gtgagcatcc tccagttagt 300
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tggagaacaa ggtcatatgg ctttgttggg acatagtctg ggagcttata tttcaactct 420
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aatacataca taattaataa ataaaacatc aaagaccagc cgacctaact ccatctaaaa 2400
tacacaactt ctacgcaaaa tataaataaa attagaaaac aaactacaat ctcagaaaag 2460
cactagca . 2468

<210> 715
<211> 924
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(924)
<223> n = a,t,c or g

<400> 715
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cccaagagac ttcgctccgc tgcaagatgg aaggaagctt aagtaagaca taaatttgta 120
atgaacttgc tcacaacatc cgccgccact gtgacttgca gtcatcatcc attaccacaa 180
aattagttgc aggatggcta ctcgtatccc tccacacatg atcatcagta tttgcctcct 240
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aatactttgc acttttgatt gtgtattatg gataccaagg aagagaagaa ggaacggaaa 360
caaagttatt ttgctcgact gaaaaagaaa aaacaagcca aacaaaatgc agagacagcc 420
tcagctgtag ctacaaggac tcatactggg aaggaagata ataatacagt agttttagag 480
ccagacaagt gcaacattgc tgtggaagag gaatatatga ctgatgagaa aaaaaagaga 540
aaaagtaatc agttaaagga gatcaggcgt acagaactaa agagatatta tagtattgat 600
gacaatcaaa acaaaacaca tgataaaaaa gagaagaaga tggtggttca gaagccccat 660
gggactatgg aatacactgc tggaaaccag gacaccctaa actccatagc actgaaattt 720
aacatcactc ccaataaatt ggtggaactg aataaacttt tcacacatac tattgttcca 780
ggccaggtcc tttttgtgcc agatgccaac tctccttcca gtaccttaag gctatcatca 840
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atgctgactt agcacggaag gctt 924

<210> 716
<211> 679
<212> DNA
<213> Homo sapiens

<400> 716
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ctgccggtgg ggactcttgc agggccgtcc ccatgttgcg ttttccgacc tgtttcccat 120
ccttccgggt ggtgggagag aagcagctcc cgcaggagat tattttcctg gtctggtcgc 180
ccaagcggga tctcattgct ttggccaaca cagctggcga ggttttactt catcgactgg 240
caagttttca tcgagtttgg agttttccac caaatgaaaa tacaggaaag gaggtgacgt 300
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ttgttttgtg tgatgtagaa aaacctgaga gcttacactc tttttctgtg gaggctccag 420
tttcctgtat gcattggatg gaagtgacag tagaaagcag tgttctcaca tcattttata 480
atgctgagga tgaatcaaat cttctcttac ctaaactacc tacactgcca aaaaactata 540
gcaacacctc aaaaatattt agtgaagaaa attctgatga aattattaag ctcttgggag 600
acgtcaggct taatattctc gtccttggag gaagctctgg atttattgag ctttatgctt 660
atggaatgtt taaaattgc 679

<210> 717
<211> 821
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(821)
<223> n = a,t,c or g

<400> 717
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actcctgaaa gcggcgcaac tcaattactt gatccttata tgccccacgc gggactcata 180
ctacgtttcc cgtgaacacg tgcagtccaa accccgcccc tgatatttat ctcagtggac 240
ggtggccgga aaaggacaat ggtttccatg tcagcggata aacgctctcc cctcggctcc 300
cggacgcgac ggaggtcgta gtagtagtga gtacgtgctg aggagcaaag gagtaaccaa 360
gagatccagt gaccgacaga gcaagagcca tgccgcgccg gggcctggtg gctgggccag 420
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aatacaaggg gaacctgctg ctgaaaccca tcgtggaagt tgcaggccag gatatcagcc 600
actggtttga tccaaagacc agagacgtga gttatgctgg aacctgggat tgtgggtaga 660
ggaaatggag agcggggatg ggaaggaaag gcggaggcta gccagagcct aatggctgct 720
ctgacaccct cgccccaaac cctcctttaa agatccgcaa gcacgaattc caccacatgg 780
nataagggtc gtcaatgnnn nnnnaagggg natcaanccc c 821

<210> 718
<211> 480
<212> DNA
<213> Homo sapiens

<400> 718
ccggattccg ggtcgacgat ttcgtgcggc ttttgtgttg ggcagcgcga atgtggcgag 60

ctcggtgcgt ctccgctgct ccttcccctt atccctggga ggtccaagtg gtcccgcggc 120
agcttctgtt gctctgggac ctgcaggtcc cggaaggtcc ttagggagga ccccagacac 180
cggagactgg gaaatggatt cagtgtcatt tgaagatgtg gctgtggcct ttactcagga 240
ggagtgggct ttgctggatc cttctcaaaa gaatctctac agagatgtga tgcaagaaat 300
cttcaggaac ctggcttctg taggaaacaa atcagaagac cagaatatcc aagatgactt 360
caaaaatcct gggagaaatc taagcagtca tgtggtagag agactgtttg aaattaaaga 420
aggcagtcaa tatggagaaa ccttcagcca ggattcaaat ttgaatctga ataagatagt 480

<210> 719
<211> 467
<212> DNA
<213> Homo sapiens

<400> 719
cgtaatctct cagcctttct gtgtctcctt tcctccgcct cagtttgggg cgggtcgggg 60
gaatggctga ggagatggag tcgtcgctcg aggcaagctt ttcgtccagc ggggcagtgt 120
caggggcctc agggtttttg cctcctgccc gctcccgcat cttcaagata atcgtgatcg 180
gcgactccaa tgtgggcaag acatgcctga cctaccgctt ctgcgctggc cgcttccccg 240
accgcaccga ggccacgata ggggtggatt tccgagaacg agcggtggag attgatgggg 300
agcgcatcaa gatccagcta tgggacacag caggacaaga acgattcaga aagagcatgg 360
ttcagcacta ctacagaaat gtacatgctg ttgtcttcgt gtatgatatg accaacatgg 420
ctagttttca tagcctacca tcttggatag aagaatgcaa acaacat 467

<210> 720
<211> 490
<212> DNA
<213> Homo sapiens

<400> 720
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gagtctgatg ttctgcattt ccagtttgaa cagcaaggag atgtggtctt gcagaaaatg 180
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ttccaggggc acaaggtgat tttggctgct tgctccactt ttatgagaga tcagttttta 300
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ttgactgctg ccagttacct tcagatggtt cacattgcgg aaaagcgcac agaagctttt 480
gtcaagttct 490

<210> 721
<211> 706
<212> DNA
<213> Homo sapiens

<400> 721
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cagaggccag gcagcagagg gactcctgcc agcttgtcct tgtggaaagc atcccccagg 420
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ggacatccac cgacctgcag gttctggctg cccgaggtgc ccatgt 706

<210> 722
<211> 677
<212> DNA
<213> Homo sapiens

<400> 722
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ctccaaggcc ccgtgggctt cttgggtttg ttgcctccgg ccgctcatta actcaggatg 120
gcgtggaaga cctcgcccgc ctcccccttct gggccgcggc tccgcttaag tgaaggcctg 180
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acccggcgct acacggtgtc cagcaagagt tgcctggttg cccggatcca actgcttaat 540
aacgagtttg tggagttcac cctgtccgtg gagagcactg gccaggaaag cctcgaggcc 600
gtggcccaga ggctggagct gcgggaggtc acttacttca gcctctggta ctacaacaag 660
caaaatcagc gccggtg 677

<210> 723
<211> 600
<212> DNA
<213> Homo sapiens

<400> 723
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ctaccagcaa ttttgagaac ttgcaaaaac agcttgcaag gaaaatgaag cttcctattt 180
tcatagcaga tgcattcaca gcaagagcat ttcgtgggaa tcctgctgct gtttgcctcc 240
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aaactgcttt tatccgaaaa ctgcacccga cagacaactt tgcacaaagt tcctgctttg 360
gactgagatg gtttacacca gcgagtgagg tcccactctg tggccatgcc accctggctt 420
ctgcagctgt gctgtttcac aaaataaaaa acatgaatag cacgctcacg tttgtcactc 480
tgagtggaga actaagggcc agacgagcag aggacggcat cgtcctggac ttgcctcttt 540
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<210> 724
<211> 530
<212> DNA
<213> Homo sapiens

<400> 724
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ctaggaaaca agcaattttg ttccttcaaa ataagaacca agactcagag cttctgccga 180
aatgaatata gcctgactgg actgtgtaat cggtcatcct gtcccctggc aaatagtcag 240
tatgccacta ttaaagaaga gaaaggacag tgctacttgt atatgaaggt tatagaacga 300
gcggcttttc ctcggcgtct ctgggaacgg gtccggctta gtaaaaacta tgagaaagca 360
ctggagcaaa tagatgaaaa tctgatttac tggccccgtt tcattcgaca caaatgtaag 420
cagagattca ccaagatcac ccaataccta attcgaatta gaaaacttac actaaagcga 480
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<210> 725
<211> 428
<212> DNA
<213> Homo sapiens

<400> 725
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tgcggcctcc tcgcaaaaca aggtgagtga ctcgcgggag caatgggagc tgtttcaggc 180
cgcgaagcgg acattggtgg atcccagcgc tgtgtgtatt gcggggaggg acacctgtgg 240
caccgttaag ggcgagtcct gatctgaaga tccgagaact tccaaaagaa actgacgttg 300
ggtcagagag agttgttgag taaaagttgg tgaagcgaag agggttcttc agacaggaaa 360
aagtacgtac aagggccctg ggacaagaga gcatgttctg tcagagtcac aaacacaagt 420
ggtccttt 428

<210> 726
<211> 859
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(859)
<223> n = a,t,c or g

<400> 726
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agcatcaagg tgttgctcca gtcggctctg agcctgggcc gcagcctgga tgcggaccat 180
gccccttgc agcagttctt tgtagtgatg gagcactgcc tcaaacatgg gctgaaagtt 240
aagaagagtt ttattggcca aaataaatca ttctttggtc ctttggagct ggtggagaaa 300
ctttgtccag aagcatcaga tatagcgact agtgtcagaa atcttccaga attaaagaca 360
gctgtgggaa gaggccgagc gtggctttat cttgcactca tgcaaaagaa actggcagat 420
tatctgaaag tgcttataga caataaacat ctcttaagcg agttctatga gcctgaggct 480
ttaatgatgg aggaagaagg gatggtgatt gttggtctgc tggtgggact caatgttctc 540
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ttccctctac cttaaggatg tgcaggatct tgatggtggc aaggagcatg aaagaattac 660
tgatgtcctt gatcaaaaaa attatgtgga agaacttaac cggcacttga gctgcacagt 720
tggggatctt caaaccaaga tagatggctt ggaaaagact aactcaaagc ttcaagaang 780
agtttcagct gcaacagacc gaatttgctc acttcaagaa gaacagcagc agttaagaga 840
acaaaatgaa ttaattcga 859

<210> 727
<211> 450
<212> DNA
<213> Homo sapiens

<400> 727
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ggtaatgagg ctgttacgcg ccttctccgc atcttggcgg gagcctgacg ccccgcttct 120
tccctaacgg ggtgttccac cggcgcctgc cgaggcctag gcctccgcag ccgccctccg 180
tctcctcagc cccgacgctg cgcccgcttt gtgctcattt ttctctgggg aaactgaggc 240
tccgagtgcg aaagtcagcc gaggtcgccc cgcccaggac agagaagggc tgggggtcgg 300
ctgagccgcg gcattcccgg gccccgctag ggctgcaggg tctcaggatg gcagcctcgg 360
cgcaggtgtc tgtgaccttt gaggatgtgg ctgtgacatt cacccaggag gagtggggac 420
agttggatgc agcccagaga accttgtatc 450

<210> 728
<211> 439
<212> DNA
<213> Homo sapiens

<400> 728
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accagcccga gagggacctg gtgcctgtac ccaggcttct gtcgctctgt cgcctgcgct 120
atgccctgct gtagtcacag gagctgtaga gaggaccccg gtacatctga aagccgggaa 180

atggacccag tggtctttga ggatgtggct gtgaacttca cccaggaaga gtggacattg 240
ctggatattt cccagaagaa tctcttcagg gaagtgatgc tggaaacttt caggaacctg 300
acctctatag gaaaaaaatg gagtgaccag aacattgaat atgagtacca aaaccccaga 360
agaagcttca ggagtctcat agaagagaaa gtcaatgaaa ttaaagaaga cagtcattgt 420
ggagaaactt ttacccagg 439

<210> 729
<211> 236
<212> DNA
<213> Homo sapiens

<400> 729
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agccgtgtgt actgcgtggt cagcactgcc cgacagtcct agctaaactt cgccaactcc 120
gctgcctttg ccgtcaccat gccacagaat gaatatattg aattacaccg taaacgctat 180
ggattccgtt tggattacca tgagaaaaag agaaagaagc aaagtcgaga ggctca 236

<210> 730
<211> 807
<212> DNA
<213> Homo sapiens

<400> 730
tgggaacaca agttgacgct ttttgtgttc cttgagtcca gtcgggaagg gcccttgtga 60
ctgggtctca tgccaaacaa cttgttacaa taagagctag ggtcccagac catgcggaaa 120
cttcatgaga atcctctgta gtctggtgag tgtagtgtcc gactctggag cccaggctgt 180
tgcttcccgg tctggtggtg aatcctccat agtctggaga tctcagccct gctgagctga 240
tgatgctgac tataggagat gttattaaac aactgattga agcccacgag caggggaaag 300
acatcgatct aaataaggtg aaaaccaaga cagctgccaa atatggcctt tctgcccagc 360
cccgcctggt ggatatcatt gctgccgtcc ctcctcagta tcgcaaggtc ttgatgccca 420
agttaaaggc gaaacccatc agaactgcta gtgggattgc tgtcgtggct gtgatgtgca 480
aaccccacag atgtccacac atcagtttta caggaaatat atgtgtatac tgccctggtg 540
gacctgattc tgattttgag tattccaccc agtcttacac tggctatgag ccaacctcca 600
tgagagctat ccgtgccaga tatgaccctt tcctacagac aagacaccga atagaacagt 660
taaaacaact tggtcatagt gtggataaag tggagtttat tgagatgggt ggaacgttta 720
tggcccttcc agaagaatac agagattatt ttattcgaaa tttacatgat gccttatcag 780
gacatacttc caacaatatt tacgagg 807

<210> 731
<211> 944
<212> DNA
<213> Homo sapiens

<400> 731
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gaggtggttg tgggctccac agcttctgat ttggaggaag ctgcgagacc gagagcctag 120
gagcaccttc cacgcccagg gctgtggtac aggttggtgg gggaggggcg ccacgcggtg 180
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caccgccgcc gccaccagga aggcggagga cgcaggagcc aagagcaagg gacgccgcca 360
cggtcatctt cgcctgcccc gccgccctct tagagacact cattgcctat ggatcatcct 420
ctcccagctt ttgcaagcac cgggctgctc gcccgctgat tttcctcctc cataggctca 480
ctgcggaggc aacggcgagg tgtccgattt gtgcacttga ggcccgcaat ccgggacggt 540
ggggaatctg cgcctcctgg ccgggcatga agaccccgtt tggaaaggca gctgcagggc 600
agcggtccag gacgggcgct ggccacggca gtgtgtctgt taccatgata aagaggaagg 660
ctgcacacaa gaagcatagg agccgaccca cctcccagcc tcgggggaac atcgtgggct 720
gcataattca gcacggatgg aaagatggag atgaacctct aacacagtgg aaaggaaccg 780
ttctggatca gctcctttga ataaacctgc ccaccaccaa gaacccatac atgactttct 840
tttcattgta tcaaacgaat gtgtccaccg gtgtgagcac cagcaactca cttcttcctc 900
agacatctct aaagctggac agaatatgag ggacaatatc gttt 944

<210> 732
<211> 761
<212> DNA
<213> Homo sapiens

<400> 732
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tggagctgga cgcgctggag gggaaggagt tgatgcagga cggcgcgtcc ctgagcgaca 120
gcaccgagga cgaggaggag ggggcgagcc tgggcgacgg cagcggggcg gaaggcggca 180
gctgcagcag cagcaggcgg tcgggcggcg atggcgggga cgaagtggag ggcagcggtg 240
tgggagctgg cgaaggagag actgtccagc acttcccgct cgcgcggccc aagtctctaa 300
tgcagaagct ccaatgctcc ttccagacct cctggctcaa ggactttccc tggctgcgct 360
attccaagga tactggtctt atgtcttgcg gctggtgcca aaagaccccc gcagatgggg 420
gaagcgtgga ccttccccca gtggggcatg atgagctttc gcgagggacc cgcaactaca 480
agaaaaccct cctcctgagg caccacgtct ctaccgagca caaactccac gaagccaacg 540
cccaggagtc agaaatacca tcagaggagg ggtactgtga ctttaatagt aggccaaatg 600
agaactctta ttgctatcaa cttctgcgac aactaaatga acagagaaag aaaggtattc 660
tttgtgatgt cagcattgtg gtaagcggaa aaatcttcaa agctcataag aacatcctgg 720
ttgcaggcag ccgtttcttt aagactttat attgcttttc a 761

<210> 733
<211> 523
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(523)
<223> n = a,t,c or g

<400> 733
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tagggaggcg tggtggtctg aagcctccga gcagccgcgg ccatggcgga tgtaaccgcc 120
cgtagtctgc aatacgagta caaggcgaac tcgaatcttg tgctccaagc tgaccgttct 180
ctcattgacc ggacccgccg ggatgaaccc acaggagagg tgctgtccct tgttgggaag 240
ctggagggca cccgtatggg agacaaggct caacggacca aaccgcagat gcaggaggaa 300
agaagagcca agcgaagaaa gcgtgatgag gaccggcatg acatcaacaa gatgaagggt 360
tatactctgc tgtcggaggg cattgatgag atggtgggca tcatctacaa gcccaaaact 420
aaagagactc gggagaccta tgaggtgcta ctcagcttca tccaggctgc tcttggggac 480
cagccacgtg atatcctttg tggggcagct gatgaagttc tag 523

<210> 734
<211> 1341
<212> DNA
<213> Homo sapiens

<400> 734
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gccagactcc catccaaaga gtcataagca gccttcttcc caccttctta catgaaatac 120
atccccacct gaacaaaggc acacggacag gaggaagggg aataggactt cgcaaaactg 180
gacacggcat cgcttcagat cttggactct gaggttccgt tgttactggt ttcacagtta 240
caggcttcgg atggtctgca cgtgctgttt caagactaat ggtagtctct attgcttctg 300
ttatgtcctt atccaacctg ttcagcctgt cctctgactc aaatatggag taatcaatgg 360
tgaaatctgc actaaagtca tcataactgg gggtgactgt ataataatag accacctgat 420
aatattcatc ctctcccagt ctttcttcat cctcatattc ttgtcccagg ataagtggca 480
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cggaggtgag gggttgggtc tgggagattt gtcctttccc gcagttggtt tccaccttcc 960
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gtggagacag ttaccctacc tggtccatgt ctccctaacc atccggaagg ctaacttcca 1260
cttttcaagc agctttggct ggtttccctc cttgatttct ctggctccca ctactattgc 1320
ttgtctcact gcccctgtat t 1341

<210> 735
<211> 703
<212> DNA
<213> Homo sapiens

<400> 735
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catgggggca caggtgaggc tgccgcccgg agagccctgc cgagaaggat atgtgctgtc 120
tctggtctgt ccaaactcct cccaggcttg gtgtgagatc acaaatgtgt cacagctgct 180
ggcttctcct gtgctctaca cggacctgaa ttacagcata aacaacttga gcatttcagc 240
aaatgtagaa aacaaataca gtctttatgt gggcttggta ctggcagtaa gctcaagtat 300
ttttattggc tccagcttca tactgaaaaa gaagggcctc ttgcaactgg ccagcaaggg 360
ctttactaga gctggacaag gtggacattc ttacctgaag gaatggctct ggtgggtagg 420
attgctgtca atactgtcct ggaatgcaag ggaaaaagtt gacctttgaa atattacatt 480
ttaaccacag acttcttgta ttttcttcac cataacaata gagaaaagta cttttctttc 540
atattttccc acctcctaat ttgaacaact attgtagctg catattttct caagaaagag 600
tacagtttcc ttgccaggac aacacggata agtgaaaggc ttctgtggct gcttggtact 660
gaacaaatgg agaagaaatg aagggtgtca gcactctcct tcc 703

<210> 736
<211> 401
<212> DNA
<213> Homo sapiens

<400> 736
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gggaaggatg gtagggcgac tggggctcac ctccgcaccg ttgtaggacc cggggtaggg 120
ttttgagccc gtgggagctg ccccacgcgg cctcgtcctg ccaacggtcg gatggcggag 180
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gaggagtgga gacagctgga cctggcccag aggaccctgt accgagaggt gatgctggag 300
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ctaaagcatg ggcaggagct gtggatagtg aagagaggcc t 401

<210> 737
<211> 933
<212> DNA
<213> Homo sapiens

<400> 737
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ggcgcggcgc tcgtgtggct ccctcgcgcc caccacgctg gcccccgggc cccggctcgc 120
ccttcccagg cgccggctgc agcagagttt cagaacaagc ttcctggaac ccatgaccca 180
tgaagtcttg tcgacattta taccgtctga gggtagcagc tcgaaagtag aagaaagtgt 240
tgccagggac ggcagtatct ctttgtgtga ccctggcggc ttatgggacg ttggcttcag 300
acctttgtga tacaccatgc tgcgtgggac gatgacggcg tggagaggaa tgaggcctga 360
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ccctcaggtc accgtccagc ctgcgtccac cgtccagaag cccggaggca ctgtgatctt 480
gggctgcgtg gtggaacctc caaggatgaa tgtaacctgg cgcctgaatg gaaaggagct 540
gaatggctcg gatgatgctc tgggtgtcct catcacccac gggaccctcg tcatcactgc 600
ccttaacaac cacactgtgg gacggtacca gtgtgtggcc cggatgcctg cgggggctgt 660
ggccagcgtg ccagccactg tgacactagc cagtgagtct gctcctttgc ctccctgcca 720
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ttagtaatgc ccagtgatgg gggacccctt gtgcccttgg aaaacctcac tccaagtaga 900
ggctgtatct ggagtgagtg tctacagaga ggg 933

<210> 738
<211> 420
<212> DNA
<213> Homo sapiens

<400> 738
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cagcacgatg tctgaagaag aggcggctca gatccccaga tccagtgtgt gggagcagga 120
ccagcagaac gtggtgcagc gtgtggtggc tctgcccctg gtcagggcca cgtgcaccgc 180
ggtctgcgat gtttacagtg cagccaagga caggcacccg ctgctgggct ccgcctgccg 240
cctggctgag aactgcgtgt gcggcctgac cacccgtgcc ctggaccacg cccagccgct 300
gctcgagcac ctgcagcccc agctggccac tatgaacagc ctcgcctgca ggggcctgga 360
caagctggaa gagaagcttc cctttctcca gcaaccttcg gagacggtgg tgacctcagc 420

<210> 739
<211> 1248
<212> DNA
<213> Homo sapiens

<400> 739
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cacccgggct gtgcccaggc cacagagcag ctgcaggcct tgggagagga cccacacagc 120
ctcctgtagg tggcaacagt gccacctgtt tgactcatag ggctgaaccg aggactgaaa 180
aagggaggag gcagaccact cggagaggag ctgggaagca gtgcagagag gagagcggag 240
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tccctgagct ggctgtacat cgggctcgtc cttctcaatg acctgcacaa cttcaatgaa 480
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tctctactgg gcacatatgc atccttgcta ttggtcctgg ccctgctcct gcggctttgt 600
agacagcccc tgcatctgca cagcctccac aaggtgctgc tgctcctcat tatgctgctt 660
gtggcggctg gccttgtggg actggacatc caatggcagc aggagaggca tagcttgcgt 720
gtgtcactgc agactgcagg tagctctgaa ctccagcagt caggccctaa gaggaaagcg 780
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tctaccgtat ccaccgaaga gagcccaaga ttctgctact gctcctattt tttggagttg 960
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acaccctgat gtccttgcgg aagacagctg aatgcggagc tactgtgttt gagactgatg 1140
tgatggtcag ctccgatggg gtccccttcc tcatgcatga tgagcacctc agcaggacca 1200
cgaatgtagc ctctgtattc ccaacccgaa tcacagccca cagcagtg 1248

<210> 740
<211> 185
<212>Amino acid
<213> Homo sapiens

<400> 740

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Asp Pro Ser Gly Gly Cys Arg Leu Gln Pro Ala Leu Val Gly Glu Thr
             20                  25                  30
Glu Met Ser Glu Lys Glu Asn Asn Phe Pro Pro Leu Pro Lys Phe Ile
         35                  40                  45
Pro Val Lys Pro Cys Phe Tyr Gln Asn Phe Ser Asp Glu Ile Pro Val
     50                  55                  60
Glu His Gln Val Leu Val Lys Arg Ile Tyr Arg Leu Trp Met Phe Tyr
 65                  70                  75                  80
Cys Ala Thr Leu Gly Val Asn Leu Ile Ala Cys Leu Ala Trp Trp Ile
                 85                  90                  95
Gly Gly Gly Ser Gly Thr Asn Phe Gly Leu Ala Phe Val Trp Leu Leu
            100                 105                 110
Leu Phe Thr Pro Cys Gly Tyr Val Cys Trp Phe Arg Pro Val Tyr Lys
        115                 120                 125
Ala Phe Arg Ala Asp Ser Ser Phe Asn Phe Met Ala Phe Phe Phe Ile
    130                 135                 140
Phe Arg Ser Pro Val Cys Pro Asp Arg His Pro Gly Asp Trp Leu Leu
145                 150                 155                 160
Arg Leu Gly Arg Val Arg Leu Ala Val Gly Asn Trp Ile Leu Pro Val
                165                 170                 175
Gln Pro Gly Arg Cys Arg Gly His Ala
            180                 185
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<210> 741
<211> 177
<212>Amino acid
<213> Homo sapiens

<400> 741

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Ser Lys Gln Ala Thr Ser Pro Phe Ala Cys Ala Ala Asp Gly Glu Asp
             20                  25                  30
Ala Met Thr Gln Asp Leu Thr Ser Arg Glu Lys Glu Glu Gly Ser Asp
         35                  40                  45
Gln His Val Ala Ser His Leu Pro Leu His Pro Ile Met His Asn Lys
     50                  55                  60
Pro His Ser Glu Glu Leu Pro Thr Leu Val Ser Thr Ile Gln Gln Asp
 65                  70                  75                  80
Ala Asp Trp Asp Ser Val Leu Ser Ser Gln Gln Arg Met Glu Ser Glu
                 85                  90                  95
Asn Asn Lys Leu Cys Ser Leu Tyr Ser Phe Arg Asn Thr Ser Thr Ser
            100                 105                 110
Pro His Lys Pro Asp Glu Gly Ser Arg Asp Arg Glu Ile Met Thr Ser
        115                 120                 125
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Val Thr Phe Gly Thr Pro Glu Arg Arg Lys Gly Ser Leu Ala Asp Val
    130                 135                 140
Val Asp Thr Leu Lys Gln Lys Lys Leu Glu Glu Met Thr Arg Thr Glu
145                 150                 155                 160
Gln Glu Asp Ser Ser Cys Met Glu Lys Leu Leu Ser Lys Asp Trp Lys
                165                 170                 175
Glu
177
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<210> 742
<211> 434
<212>Amino acid
<213> Homo sapiens

<400> 742

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  1               5                  10                  15
Lys Ser Thr Ala Asp Leu Arg Met Met Gly Arg Ser Pro Gly Phe Ala
            20                  25                  30
Met Gln His Ile Val Gly Val Pro His Val Leu Val Arg Arg Gly Leu
        35                  40                  45
Leu Gly Arg Asp Leu Phe Met Thr Arg Thr Leu Cys Ser Pro Gly Pro
    50                  55                  60
Ser Gln Pro Gly Glu Lys Arg Pro Glu Glu Val Ala Leu Gly Leu His
65                  70                  75                  80
His Arg Leu Pro Ala Leu Gly Arg Ala Leu Gly His Ser Ile Gln Gln
                85                  90                  95
Arg Ala Thr Ser Thr Ala Lys Thr Trp Trp Asp Arg Tyr Glu Glu Phe
            100                 105                 110
Val Gly Leu Asn Glu Val Arg Glu Ala Gln Gly Lys Val Thr Glu Ala
        115                 120                 125
Glu Lys Val Phe Met Val Ala Arg Gly Leu Val Arg Glu Ala Arg Glu
    130                 135                 140
Asp Leu Glu Val His Gln Ala Lys Leu Lys Glu Val Arg Asp Arg Leu
145                 150                 155                 160
Asp Arg Val Ser Arg Glu Asp Ser Gln Tyr Leu Glu Leu Ala Thr Leu
                165                 170                 175
Glu His Arg Met Leu Gln Glu Glu Lys Arg Leu Arg Thr Ala Tyr Leu
            180                 185                 190
Arg Ala Glu Asp Ser Glu Arg Glu Lys Phe Ser Leu Phe Ser Ala Ala
        195                 200                 205
Val Arg Glu Ser His Glu Lys Glu Arg Thr Arg Ala Glu Arg Thr Lys
    210                 215                 220
Asn Trp Ser Leu Ile Gly Ser Val Leu Gly Ala Leu Ile Gly Val Ala
225                 230                 235                 240
Gly Ser Thr Tyr Val Asn Arg Val Arg Leu Gln Glu Leu Lys Ala Leu
                245                 250                 255
Leu Leu Glu Ala Gln Lys Gly Pro Val Ser Leu Gln Glu Ala Ile Arg
            260                 265                 270
Glu Gln Ala Ser Ser Tyr Ser Arg Gln Gln Arg Asp Leu His Asn Leu
        275                 280                 285
Met Val Asp Leu Arg Gly Leu Val His Ala Ala Gly Pro Gly Gln Asp
    290                 295                 300
Ser Gly Ser Gln Ala Gly Ser Pro Pro Thr Arg Asp Arg Asp Val Asp
305                 310                 315                 320
Val Leu Ser Ala Ala Leu Lys Glu Gln Leu Ser His Ser Arg Gln Val
                325                 330                 335
His Ser Cys Leu Glu Gly Leu Arg Glu Gln Leu Asp Gly Leu Glu Lys
            340                 345                 350
```

```
Thr Cys Ser Gln Met Ala Gly Val Val Gln Leu Val Lys Ser Ala Ala
        355                 360                 365
His Pro Gly Leu Val Glu Pro Ala Asp Gly Ala Met Pro Ser Phe Leu
    370                 375                 380
Leu Glu Gln Gly Ser Met Ile Leu Ala Leu Ser Asp Thr Glu Gln Arg
385                 390                 395                 400
Leu Glu Ala Gln Val Asn Arg Asn Thr Ile Tyr Ser Thr Leu Val Thr
                405                 410                 415
Cys Val Thr Phe Val Ala Thr Leu Pro Val Leu Tyr Met Leu Phe Lys
            420                 425                 430
Ala Ser
    434
```

<210> 743
<211> 211
<212>Amino acid
<213> Homo sapiens

<400> 743

```
Asn Leu Pro Pro Leu Thr Pro Gln Pro Gly Pro Arg Leu Ala Gly Ser
  1               5                  10                  15
Gly Pro Ser His Trp Phe Ser Pro Leu Ser Leu Pro Val Ala Ser Lys
            20                  25                  30
Ala Pro Gly Thr Met Ala Gln Ala Leu Gly Glu Asp Leu Val Gln Pro
        35                  40                  45
Pro Glu Leu Gln Asp Asp Ser Ser Ser Leu Gly Ser Asp Ser Glu Leu
    50                  55                  60
Ser Gly Pro Gly Pro Tyr Arg Gln Ala Asp Arg Tyr Gly Phe Ile Gly
65                  70                  75                  80
Gly Ser Ser Ala Glu Pro Gly Pro Gly His Pro Pro Ala Asp Leu Ile
                85                  90                  95
Arg Gln Arg Glu Met Lys Trp Val Glu Met Thr Ser His Trp Glu Lys
            100                 105                 110
Thr Met Ser Arg Arg Tyr Lys Lys Val Lys Met Gln Cys Arg Lys Gly
        115                 120                 125
Ile Pro Ser Ala Leu Arg Ala Arg Cys Trp Pro Leu Leu Cys Gly Ala
    130                 135                 140
His Val Cys Gln Lys Asn Ser Pro Gly Thr Tyr Gln Glu Leu Ala Glu
145                 150                 155                 160
Ala Pro Gly Asp Pro Gln Trp Met Glu Thr Ile Gly Arg Asp Leu His
                165                 170                 175
Arg Gln Phe Pro Leu His Glu Met Phe Val Ser Pro Gln Gly His Gly
            180                 185                 190
Gln Gln Gly Leu Leu Gln Val Leu Lys Ala Tyr Thr Leu Tyr Arg Pro
        195                 200                 205
Glu Gln Gly
    210 211
```

<210> 744
<211> 55
<212>Amino acid
<213> Homo sapiens

<400> 744

```
Leu Arg Gly Met Ala Ala Ala Ala Ala Gly Pro Ala Ala Ser Gln Arg
 1               5                  10                  15
Phe Phe Gln Ser Phe Ser Asp Ala Leu Ile Asp Gln Asp Pro Gln Ala
            20                  25                  30
Ala Leu Glu Val Gly Glu Pro Phe Leu Leu Pro Pro Leu Pro Ala Asp
        35                  40                  45
Pro Pro Pro Ser Ser Thr Ala
    50                  55
```

<210> 745
<211> 182
<212>Amino acid
<213> Homo sapiens

<400> 745

```
Trp Ala Cys Phe Arg Ser Ala His Cys Ser Arg His Leu Arg Asn Arg
 1               5                  10                  15
Ile Phe Met Tyr Leu Tyr Trp Asp Lys Thr Arg Ser Pro Val Cys Lys
            20                  25                  30
Gly Pro Ala Leu Arg Glu Glu Arg Pro Gln Pro Arg Leu Lys Leu Glu
        35                  40                  45
Asp Tyr Lys Asp Arg Leu Lys Ser Gly Glu His Leu Asn Pro Asp Gln
    50                  55                  60
Leu Glu Ala Val Glu Lys Tyr Glu Glu Val Leu His Asn Leu Glu Phe
65                  70                  75                  80
Ala Lys Glu Leu Gln Lys Thr Phe Ser Gly Leu Ser Leu Asp Leu Leu
                85                  90                  95
Lys Ala Gln Lys Lys Ala Gln Arg Arg Glu His Met Leu Lys Leu Glu
            100                 105                 110
Ala Glu Lys Lys Lys Leu Arg Thr Ile Leu Gln Val Gln Tyr Val Leu
        115                 120                 125
Gln Asn Leu Thr Gln Glu His Val Gln Lys Asp Phe Lys Gly Gly Leu
    130                 135                 140
Asn Gly Ala Val Tyr Leu Pro Ser Lys Glu Leu Asp Tyr Leu Ile Lys
145                 150                 155                 160
Phe Ser Lys Leu Thr Cys Pro Glu Arg Asn Glu Ser Leu Arg Gln Thr
                165                 170                 175
Leu Glu Gly Ser Thr Val
            180     182
```

<210> 746
<211> 136
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(136)
<223> X = any amino acid or stop code

<400> 746

```
Xaa Ala Gly Val Gln Met Lys Leu Glu Phe Leu Gln Arg Lys Phe Trp
 1               5                  10                  15
Ala Ala Thr Arg Gln Cys Ser Thr Val Asp Gly Pro Cys Thr Gln Ser
```

```
            20                  25                  30
Cys Glu Asp Ser Asp Leu Asp Cys Phe Val Ile Asp Asn Asn Gly Phe
        35                  40                  45
Ile Leu Ile Ser Lys Arg Ser Arg Glu Thr Gly Arg Phe Leu Gly Glu
    50                  55                  60
Val Asp Gly Ala Val Leu Thr Gln Leu Leu Ser Met Gly Val Phe Ser
65                  70                  75                  80
Gln Val Thr Met Tyr Asp Tyr Gln Ala Met Cys Lys Pro Ser Ser His
                85                  90                  95
His His Ser Ala Ala Gln Pro Leu Val Ser Pro Ile Ser Ala Phe Leu
            100                 105                 110
Thr Ala Thr Arg Trp Leu Leu Gln Glu Leu Val Leu Phe Leu Leu Glu
        115                 120                 125
Trp Ser Val Trp Gly Ser Xaa  *
    130                 135
```

<210> 747
<211> 156
<212>Amino acid
<213> Homo sapiens

<400> 747

```
Cys Arg Gly Arg Leu Ala Gln Leu Glu Glu Ala Ala Val Ala Ala Thr
  1                 5                  10                  15
Met Ser Ala Gly Asp Ala Val Cys Thr Gly Trp Leu Val Lys Ser Pro
            20                  25                  30
Pro Glu Arg Lys Leu Gln Arg Tyr Ala Trp Arg Lys Arg Trp Phe Val
        35                  40                  45
Leu Arg Arg Gly Arg Met Ser Gly Asn Pro Asp Val Leu Glu Tyr Tyr
    50                  55                  60
Arg Asn Lys His Ser Ser Lys Pro Ile Arg Val Ile Asp Leu Ser Glu
65                  70                  75                  80
Cys Ala Val Trp Lys His Val Gly Pro Ser Phe Val Arg Lys Glu Phe
                85                  90                  95
Gln Asn Asn Phe Val Phe Ile Val Lys Thr Thr Ser Arg Thr Phe Tyr
            100                 105                 110
Leu Val Ala Lys Thr Glu Gln Glu Met Gln Val Trp Val His Ser Ile
        115                 120                 125
Ser Gln Val Cys Asn Leu Gly His Leu Glu Asp Gly Ala Ala Asp Ser
    130                 135                 140
Met Glu Ser Leu Ser Tyr Thr Arg Ser Tyr Leu Gln
145                 150                 155 156
```

<210> 748
<211> 55
<212>Amino acid
<213> Homo sapiens

<400> 748

```
Ile Pro Ala Val Pro Leu Thr Ser Cys Val Thr Val Gly Ser Tyr Ser
  1                 5                  10                  15
Leu Ser Val Arg Asp Tyr Asp Pro Arg Gln Gly Asp Thr Val Lys His
            20                  25                  30
Tyr Lys Ile Arg Thr Leu Asp Lys Arg Gly Phe Tyr Ile Ser Pro Arg
```

```
        35                  40                  45
Ser Thr Phe Ser Thr Leu Gln
     50                  55
```

<210> 749
<211> 381
<212>Amino acid
<213> Homo sapiens

<400> 749

```
Lys Asp Ser Val Leu Asn Ile Ala Arg Gly Lys Lys Tyr Gly Glu Lys
  1               5                  10                  15
Thr Lys Arg Val Ser Ser Arg Lys Lys Pro Ala Leu Lys Cys Thr Ser
            20                  25                  30
Gln Lys Gln Pro Ala Leu Lys Ala Ile Cys Asp Lys Glu Asp Ser Val
        35                  40                  45
Pro Asn Thr Ala Thr Glu Lys Lys Asp Glu Gln Ile Ser Gly Thr Val
    50                  55                  60
Ser Ser Gln Lys Gln Pro Ala Leu Lys Ala Thr Ser Asp Lys Lys Asp
65                  70                  75                  80
Ser Val Ser Asn Ile Pro Thr Glu Ile Lys Asp Gly Gln Gln Ser Gly
                85                  90                  95
Thr Val Ser Ser Gln Lys Gln Pro Ala Trp Lys Ala Thr Ser Val Lys
            100                 105                 110
Lys Asp Ser Val Ser Asn Ile Ala Thr Glu Ile Lys Asp Gly Gln Ile
        115                 120                 125
Arg Gly Thr Val Ser Ser Gln Arg Gln Pro Ala Leu Lys Ala Thr Gly
    130                 135                 140
Asp Glu Lys Asp Ser Val Ser Asn Ile Ala Arg Glu Ile Lys Asp Gly
145                 150                 155                 160
Glu Lys Ser Gly Thr Val Ser Pro Gln Lys Gln Ser Ala Gln Lys Val
                165                 170                 175
Ile Phe Lys Lys Lys Val Ser Leu Leu Asn Ile Ala Thr Arg Ile Thr
            180                 185                 190
Gly Gly Trp Lys Ser Gly Thr Glu Tyr Pro Glu Asn Leu Pro Thr Leu
        195                 200                 205
Lys Ala Thr Ile Glu Asn Lys Asn Ser Val Leu Asn Thr Ala Thr Lys
    210                 215                 220
Met Lys Asp Val Gln Thr Ser Thr Pro Glu Gln Asp Leu Glu Met Ala
225                 230                 235                 240
Ser Glu Gly Glu Gln Lys Arg Leu Glu Glu Tyr Glu Asn Asn Gln Pro
                245                 250                 255
Gln Val Lys Asn Gln Ile His Ser Arg Asp Asp Leu Asp Asp Ile Ile
            260                 265                 270
Gln Ser Ser Gln Thr Val Ser Glu Asp Gly Asp Ser Leu Cys Cys Asn
        275                 280                 285
Cys Lys Asn Val Ile Leu Leu Ile Asp Gln His Glu Met Lys Cys Lys
    290                 295                 300
Asp Cys Val His Leu Leu Lys Ile Lys Lys Thr Phe Cys Leu Cys Lys
305                 310                 315                 320
Arg Leu Thr Glu Leu Lys Asp Asn His Cys Glu Gln Leu Arg Val Lys
                325                 330                 335
Ile Arg Lys Leu Lys Asn Lys Ala Ser Val Leu Gln Lys Arg Leu Ser
            340                 345                 350
Glu Lys Glu Glu Ile Lys Ser Gln Leu Lys His Glu Thr Leu Glu Leu
        355                 360                 365
Glu Lys Glu Leu Cys Ser Leu Arg Phe Ala Ile Gln Gln
    370                 375                 380 381
```

<210> 750
<211> 296
<212>Amino acid
<213> Homo sapiens

<400> 750

```
Ser Pro Leu Arg Tyr Arg Ala Gly Gln Ser Gly Ser Thr Ile Ser Ser
  1               5                  10                  15
Ser Ser Cys Ala Met Trp Arg Cys Gly Gly Arg Gln Gly Leu Cys Val
             20                  25                  30
Leu Arg Arg Leu Ser Gly Gly His Ala His His Arg Ala Trp Arg Trp
         35                  40                  45
Asn Ser Asn Arg Ala Cys Glu Arg Ala Leu Gln Tyr Lys Leu Gly Asp
     50                  55                  60
Lys Ile His Gly Phe Thr Val Asn Gln Val Thr Ser Val Pro Glu Leu
 65                  70                  75                  80
Phe Leu Thr Ala Val Lys Leu Thr His Asp Asp Thr Gly Ala Arg Tyr
                 85                  90                  95
Leu His Leu Ala Arg Glu Asp Thr Asn Asn Leu Phe Ser Val Gln Phe
            100                 105                 110
Arg Thr Thr Pro Met Asp Ser Thr Gly Val Pro His Ile Leu Glu His
        115                 120                 125
Thr Val Leu Cys Gly Ser Gln Lys Tyr Pro Cys Arg Asp Pro Phe Phe
    130                 135                 140
Lys Met Leu Asn Arg Ser Leu Ser Thr Phe Met Asn Ala Phe Thr Ala
145                 150                 155                 160
Ser Asp Tyr Thr Leu Tyr Pro Phe Ser Thr Gln Asn Pro Lys Asp Phe
                165                 170                 175
Gln Asn Leu Leu Ser Val Tyr Leu Asp Ala Thr Phe Phe Pro Cys Leu
            180                 185                 190
Arg Glu Leu Asp Phe Trp Gln Glu Gly Trp Arg Leu Glu His Glu Asn
        195                 200                 205
Pro Ser Asp Pro Gln Thr Pro Leu Val Phe Lys Gly Val Val Phe Asn
    210                 215                 220
Glu Met Lys Gly Ala Phe Thr Asp Asn Glu Arg Ile Phe Ser Gln His
225                 230                 235                 240
Leu Gln Asn Arg Leu Leu Pro Asp His Thr Tyr Ser Val Val Ser Gly
                245                 250                 255
Gly Asp Pro Leu Cys Ile Pro Glu Leu Thr Trp Glu Gln Leu Lys Gln
            260                 265                 270
Phe His Ala Thr His Tyr His Pro Ser Asn Ala Arg Phe Phe Thr Tyr
        275                 280                 285
Gly Asn Phe Pro Leu Asp Gln His
    290                 295 296
```

<210> 751
<211> 163
<212>Amino acid
<213> Homo sapiens

<400> 751

```
Arg Gly Ala Lys Ala Lys Ser Ala Val Leu Pro Pro Gly Pro Pro Cys
  1               5                  10                  15
Ser Ser Ile Leu Ile Leu Ser Pro Pro Ala Pro Leu Thr Pro Arg Ser
```

```
            20                  25                  30
Pro Gly Thr Glu Ala Thr Arg Pro Thr Ala Met Ser Lys Ser Leu Lys
        35                  40                  45
Lys Lys Ser His Trp Thr Ser Lys Val His Glu Ser Val Ile Gly Arg
    50                  55                  60
Asn Pro Glu Gly Gln Leu Gly Phe Glu Leu Lys Gly Gly Ala Glu Asn
65                  70                  75                  80
Gly Gln Phe Pro Tyr Leu Gly Glu Val Lys Pro Gly Lys Val Ala Tyr
                85                  90                  95
Glu Ser Gly Ser Lys Leu Val Ser Glu Glu Leu Leu Leu Glu Val Asn
            100                 105                 110
Glu Thr Pro Val Ala Gly Leu Thr Ile Arg Asp Val Leu Ala Val Ile
        115                 120                 125
Lys His Cys Lys Asp Pro Leu Arg Leu Lys Cys Val Lys Gln Gly Glu
    130                 135                 140
Ser Ser Gly Leu Leu Ser Val Leu Pro Gly Gly Gly Thr Ala Arg Gly
145                 150                 155                 160
Ala Gly Gln
        163
```

<210> 752
<211> 99
<212>Amino acid
<213> Homo sapiens

<400> 752

```
Ser His Arg Pro Gln Pro Asp Ala Trp Arg Gln Gly Asn Ala Phe Gln
  1               5                  10                  15
Cys Val Gln Lys Glu Lys Met Gln Val Ser Ser Ala Glu Val Arg Ile
            20                  25                  30
Gly Pro Met Arg Leu Thr Gln Asp Pro Ile Gln Val Leu Leu Ile Phe
        35                  40                  45
Ala Lys Glu Asp Ser Gln Ser Asp Gly Phe Trp Trp Ala Cys Asp Arg
    50                  55                  60
Ala Gly Tyr Arg Cys Asn Ile Ala Arg Thr Pro Glu Ser Ala Leu Glu
65                  70                  75                  80
Cys Phe Leu Asp Lys His His Glu Ile Ile Val Ile Asp His Arg Gln
                85                  90                  95
Thr Gln Asn
        99
```

<210> 753
<211> 193
<212>Amino acid
<213> Homo sapiens

<400> 753

```
Phe Arg Leu Ala Gly Cys Gly His Leu Leu Val Ser Leu Leu Gly Leu
  1               5                  10                  15
Leu Leu Leu Leu Ala Arg Ser Gly Thr Arg Ala Leu Val Cys Leu Pro
            20                  25                  30
Cys Asp Glu Ser Lys Cys Glu Glu Pro Arg Asn Cys Pro Gly Ser Ile
        35                  40                  45
Val Gln Gly Val Cys Gly Cys Cys Tyr Thr Cys Ala Ser Gln Arg Asn
```

```
     50                  55                  60
Glu Ser Cys Gly Gly Thr Phe Gly Ile Tyr Gly Thr Cys Asp Arg Gly
 65                  70                  75                  80
Leu Arg Cys Val Ile Arg Pro Pro Leu Asn Gly Asp Ser Leu Thr Glu
                 85                  90                  95
Tyr Glu Ala Gly Val Cys Glu Asp Glu Asn Trp Thr Asp Asp Gln Leu
            100                 105                 110
Leu Gly Phe Lys Pro Cys Asn Glu Asn Leu Ile Ala Gly Cys Asn Ile
        115                 120                 125
Ile Asn Gly Lys Cys Glu Cys Asn Thr Ile Arg Thr Cys Ser Asn Pro
    130                 135                 140
Phe Glu Phe Pro Ser Gln Asp Met Cys Leu Ser Ala Leu Lys Arg Ile
145                 150                 155                 160
Glu Glu Glu Lys Pro Asp Cys Ser Lys Ala Arg Cys Glu Val Gln Phe
                165                 170                 175
Ser Pro Arg Cys Pro Glu Asp Ser Val Leu Ile Glu Gly Tyr Ala Pro
            180                 185                 190
Pro
193
```

<210> 754
<211> 73
<212>Amino acid
<213> Homo sapiens

<400> 754

```
Phe Arg Met Ala Ala Asn Val Gly Ser Met Phe Gln Tyr Trp Lys Arg
  1               5                  10                  15
Phe Asp Leu Gln Gln Leu Gln Arg Glu Leu Asp Ala Thr Ala Thr Val
             20                  25                  30
Leu Ala Asn Arg Gln Asp Glu Ser Glu Gln Ser Arg Lys Arg Leu Ile
         35                  40                  45
Glu Gln Ser Arg Glu Phe Lys Lys Asn Thr Pro Glu Val Arg Arg Val
     50                  55                  60
Thr Ile Val Phe Ala Leu Lys Gly Ser
 65                  70          73
```

<210> 755
<211> 83
<212>Amino acid
<213> Homo sapiens

<400> 755

```
Glu Thr Leu Ser Cys Arg Ile Met Asp His Pro Ser Arg Glu Lys Asp
  1               5                  10                  15
Glu Arg Gln Arg Thr Thr Lys Pro Met Ala Gln Arg Ser Ala His Cys
             20                  25                  30
Ser Arg Pro Ser Gly Ser Ser Ser Ser Ser Gly Val Leu Met Val Gly
         35                  40                  45
Pro Asn Phe Arg Val Gly Lys Lys Ile Gly Cys Gly Asn Phe Gly Glu
     50                  55                  60
Leu Arg Leu Gly Glu Gly Leu Pro Gln Val Tyr Tyr Phe Gly Pro Cys
 65                  70                  75                  80
Gly Lys Tyr
```

83

<210> 756
<211> 100
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(100)
<223> X = any amino acid or stop code

<400> 756
Gly Cys Cys Lys Asp Xaa His Ser Gly Val Ile Gly Arg Ser Trp Ala
1 5 10 15
Met Leu Phe Ala Ser Gly Gly Phe Gln Val Lys Leu Tyr Asp Ile Glu
20 25 30
Gln Gln Gln Ile Arg Asn Ala Leu Glu Asn Ile Arg Trp Ala Ser Arg
35 40 45
Arg Ser Pro Glu Gly Met Glu Val Gly Leu Phe Leu Ser Val Gly Leu
50 55 60
Val Cys His Ile Leu Lys Ala Met Arg Ile Cys Asp Val Thr Phe Ser
65 70 75 80
Ser Asp Gly Tyr Cys Ser Ala Ser Glu Leu Val Lys Ala Arg Pro Thr
85 90 95
Val Ala Gly Met
100

<210> 757
<211> 130
<212>Amino acid
<213> Homo sapiens

<400> 757
Asn Ser Arg Val Asp Asp Phe Val Ser Ala Arg Pro Lys Pro Arg Pro
1 5 10 15
Leu Pro Arg Ala Arg Gly Met Val Val Val Thr Gly Arg Glu Pro Asp
20 25 30
Ser Arg Arg Gln Asp Gly Ala Met Ser Ser Ser Asp Ala Glu Asp Asp
35 40 45
Phe Leu Glu Pro Ala Thr Pro Thr Ala Thr Gln Ala Gly His Ala Leu
50 55 60
Pro Pro Ala Ala Thr Gly Ser Phe Leu Arg Leu Phe Pro Leu Thr Ser
65 70 75 80
Glu Gly Leu Thr Ser Leu His Ala Cys Pro His Cys Gly Ala Thr Lys
85 90 95
Thr Pro Cys Trp Gln Pro Cys Ser Val Gly Gly Thr Thr Ser Pro Arg
100 105 110
Thr Pro Arg Ala Gly Thr Ser Ser Thr Glu Met Ala His Thr Leu Glu
115 120 125
Met Cys
130

<210> 758
<211> 121
<212>Amino acid
<213> Homo sapiens

<400> 758

```
Arg Ala Leu Trp Val Gly Gly Cys Ser Gly Glu Ala Cys Gly Ile Gly
 1               5                  10                  15
Met Ser Gly Leu Leu Thr Asp Pro Glu Gln Arg Ala Gln Glu Pro Arg
            20                  25                  30
Tyr Pro Gly Phe Val Leu Gly Leu Asp Val Gly Ser Ser Val Ile Arg
        35                  40                  45
Cys His Val Tyr Asp Arg Ala Ala Arg Val Cys Gly Ser Ser Val Gln
    50                  55                  60
Lys Val Glu Asn Leu Tyr Pro Gln Ile Gly Trp Val Glu Ile Asp Pro
65                  70                  75                  80
Asp Val Leu Trp Ile Gln Phe Val Ala Val Ile Lys Glu Ala Val Lys
                85                  90                  95
Ala Ala Gly Ile Gln Met Asn Gln Ile Val Gly Leu Gly Ile Ser Thr
            100                 105                 110
Gln Arg Ala Thr Phe Ile Thr Trp Asn
        115                 120 121
```

<210> 759
<211> 210
<212>Amino acid
<213> Homo sapiens

<400> 759

```
Gly Leu Ala Ala Glu Gln Ser Met Gln Phe Val Lys Leu Trp Cys Gly
 1               5                  10                  15
Cys Ser Gly Glu Phe Pro Thr Arg Leu Arg Arg Arg Thr Pro Leu Thr
            20                  25                  30
Glu Ala Met Glu Gly Gly Pro Ala Val Cys Cys Gln Asp Pro Arg Ala
        35                  40                  45
Glu Leu Val Glu Arg Val Ala Ala Ile Asp Val Thr His Leu Glu Glu
    50                  55                  60
Ala Asp Gly Gly Pro Glu Pro Thr Arg Asn Gly Val Asp Pro Pro Pro
65                  70                  75                  80
Arg Ala Arg Ala Ala Ser Val Ile Pro Gly Ser Thr Ser Arg Leu Leu
                85                  90                  95
Pro Ala Arg Pro Ser Leu Ser Ala Arg Lys Leu Ser Leu Gln Glu Arg
            100                 105                 110
Pro Ala Gly Ser Tyr Leu Glu Ala Gln Ala Gly Pro Tyr Ala Thr Gly
        115                 120                 125
Pro Ala Ser His Ile Ser Pro Arg Ala Trp Arg Arg Pro Thr Ile Glu
    130                 135                 140
Ser His His Val Ala Ile Ser Asp Ala Glu Asp Cys Val Gln Leu Asn
145                 150                 155                 160
Gln Tyr Lys Leu Gln Ser Glu Ile Gly Lys Gly Ala Tyr Gly Val Val
                165                 170                 175
Arg Leu Ala Tyr Asn Glu Ser Glu Asp Arg His Tyr Ala Met Lys Val
            180                 185                 190
Leu Ser Lys Lys Lys Leu Leu Lys Gln Tyr Gly Phe Pro Arg Arg Pro
        195                 200                 205
```

Pro Pro
210

<210> 760
<211> 172
<212>Amino acid
<213> *Homo sapiens*

<400> 760

Phe	Val	Tyr	Gly	Lys	Pro	Val	Thr	Leu	Trp	Pro	Thr	Ile	Ser	Ser	Val
1				5					10						15
Val	Pro	Ser	Thr	Phe	Leu	Gly	Leu	Gly	Asn	Tyr	Glu	Val	Glu	Val	Glu
			20					25					30		
Ala	Glu	Pro	Asp	Val	Arg	Gly	Pro	Glu	Ile	Val	Thr	Met	Gly	Glu	Asn
		35					40					45			
Asp	Pro	Pro	Ala	Val	Glu	Ala	Pro	Phe	Ser	Phe	Arg	Ser	Leu	Phe	Gly
	50					55					60				
Leu	Asp	Asp	Leu	Lys	Ile	Ser	Pro	Val	Ala	Pro	Asp	Ala	Asp	Ala	Val
65					70					75					80
Ala	Ala	Gln	Ile	Leu	Ser	Leu	Leu	Pro	Leu	Lys	Phe	Phe	Pro	Ile	Ile
				85					90					95	
Val	Ile	Gly	Ile	Ile	Ala	Leu	Ile	Leu	Ala	Leu	Ala	Ile	Gly	Leu	Gly
			100					105					110		
Ile	His	Phe	Asp	Cys	Ser	Gly	Lys	Tyr	Arg	Cys	Arg	Ser	Ser	Phe	Lys
		115					120					125			
Cys	Ile	Glu	Leu	Ile	Ala	Arg	Cys	Asp	Gly	Val	Ser	Asp	Cys	Lys	Asp
	130					135					140				
Gly	Glu	Asp	Glu	Tyr	Arg	Cys	Val	Arg	Val	Gly	Gly	Gln	Asn	Ala	Ala
145					150					155					160
Leu	Gln	Val	Phe	Thr	Ala	Ala	Ser	Arg	Lys	Thr	Met				
				165					170		172				

<210> 761
<211> 104
<212>Amino acid
<213> Homo sapiens

<400> 761

Ser	Leu	Ala	Met	Pro	Phe	Gly	Cys	Val	Thr	Leu	Gly	Asp	Lys	Lys	Asn
1				5					10						15
Tyr	Asn	Gln	Pro	Ser	Glu	Val	Thr	Asp	Arg	Tyr	Asp	Leu	Gly	Gln	Val
			20					25					30		
Ile	Lys	Thr	Glu	Glu	Phe	Cys	Glu	Ile	Phe	Arg	Ala	Lys	Asp	Lys	Thr
		35					40					45			
Thr	Gly	Lys	Leu	His	Thr	Cys	Lys	Lys	Phe	Gln	Lys	Arg	Asp	Gly	Arg
	50					55					60				
Lys	Val	Arg	Lys	Ala	Ala	Lys	Asn	Glu	Ile	Gly	Ile	Leu	Lys	Met	Val
65					70					75					80
Lys	His	Pro	Asn	Ile	Leu	Gln	Leu	Val	Asp	Val	Phe	Val	Thr	Arg	Lys
				85					90					95	
Glu	Tyr	Phe	Ile	Phe	Leu	Glu	Leu								
			100				104								

<210> 762
<211> 249
<212>Amino acid
<213> Homo sapiens

<400> 762

```
Gln Arg Arg Arg Phe Arg Ala Gly Leu Trp Gly Gly His Gly Leu Thr
 1               5                  10                  15
Asp Gly Leu Arg Arg Asn Gly Gly Cys Gly Cys Ser Ala Arg Val Pro
            20                  25                  30
Arg Val Gly Glu Arg Leu Arg Gly His Arg Cys Pro Asp Pro Leu Cys
        35                  40                  45
Leu Leu Leu Asp Met Leu Phe Leu Ser Phe His Ala Gly Ser Trp Glu
    50                  55                  60
Ser Trp Cys Cys Cys Cys Leu Ile Pro Ala Asp Arg Pro Trp Asp Arg
65                  70                  75                  80
Gly Gln His Trp Gln Leu Glu Met Ala Asp Thr Arg Ser Val His Glu
                85                  90                  95
Thr Arg Phe Glu Ala Ala Val Lys Val Ile Gln Ser Leu Pro Lys Asn
            100                 105                 110
Gly Ser Phe Gln Pro Thr Asn Glu Met Met Leu Lys Phe Tyr Ser Phe
        115                 120                 125
Tyr Lys Gln Ala Thr Glu Gly Pro Cys Lys Leu Ser Arg Pro Gly Phe
    130                 135                 140
Trp Asp Pro Ile Gly Arg Tyr Lys Trp Asp Ala Trp Ser Ser Leu Gly
145                 150                 155                 160
Asp Met Thr Lys Glu Glu Ala Met Ile Ala Tyr Val Glu Glu Met Lys
                165                 170                 175
Lys Ile Ile Glu Thr Met Pro Met Thr Glu Lys Val Glu Glu Leu Leu
            180                 185                 190
Arg Val Ile Gly Pro Phe Tyr Glu Ile Val Glu Asp Lys Lys Ser Gly
        195                 200                 205
Arg Ser Ser Asp Ile Thr Ser Asp Leu Gly Asn Val Leu Thr Ser Thr
    210                 215                 220
Pro Asn Ala Lys Thr Val Asn Gly Lys Ala Glu Ser Ser Asp Ser Gly
225                 230                 235                 240
Ala Glu Ser Glu Glu Glu Glu Ala Cys
                245                 249
```

<210> 763
<211> 184
<212>Amino acid
<213> Homo sapiens

<400> 763

```
Ser Cys Phe Lys Gly Arg Thr Gly Gly Arg Ser Gly Ser Ser Gly Asp
 1               5                  10                  15
Ser Ser Arg Trp Ala Arg Cys Gly Arg His Phe Ser Ala Ser Thr Glu
            20                  25                  30
Glu Pro Pro Leu Ser Gln Pro Cys Ser Ala Leu Pro Arg Ser Gly Arg
        35                  40                  45
Arg Gly Cys Ala Val Pro Ser Ser Val Thr Lys Met Leu Ser Phe Phe
    50                  55                  60
Arg Arg Thr Leu Gly Arg Arg Ser Met Arg Lys His Ala Glu Lys Glu
65                  70                  75                  80
```

```
Arg Leu Arg Glu Ala Gln Arg Ala Ala Thr His Ile Pro Ala Ala Gly
                 85                  90                  95
Asp Ser Lys Ser Ile Ile Thr Cys Arg Val Ser Leu Leu Asp Gly Thr
            100                 105                 110
Asp Val Ser Val Asp Leu Pro Lys Lys Ala Lys Gly Gln Glu Leu Phe
        115                 120                 125
Asp Gln Ile Met Tyr His Leu Asp Leu Ile Glu Ser Asp Tyr Phe Gly
    130                 135                 140
Leu Arg Phe Met Asp Ser Ala Gln Val Ala His Trp Leu Asp Gly Thr
145                 150                 155                 160
Lys Ser Ile Lys Lys Gln Val Lys Ile Gly Ser Pro Tyr Cys Leu His
                165                 170                 175
Leu Arg Val Lys Phe Tyr Ser Ser
            180             184
```

<210> 764
<211> 138
<212>Amino acid
<213> Homo sapiens

<400> 764

```
Glu Ser Arg Glu Arg Ser Gly Asn Arg Arg Gly Ala Glu Asp Arg Gly
  1                 5                  10                  15
Thr Cys Gly Leu Gln Ser Pro Ser Ala Met Leu Gly Ala Lys Pro His
             20                  25                  30
Trp Leu Pro Gly Pro Leu His Ser Pro Gly Leu Pro Leu Val Leu Val
         35                  40                  45
Leu Leu Ala Leu Gly Ala Gly Trp Ala Gln Glu Gly Ser Glu Pro Val
     50                  55                  60
Leu Leu Glu Gly Glu Cys Leu Val Val Cys Glu Pro Gly Arg Ala Ala
 65                  70                  75                  80
Ala Gly Gly Pro Gly Gly Ala Ala Leu Gly Glu Ala Pro Pro Gly Arg
                 85                  90                  95
Val Ala Phe Ala Ala Val Arg Ser His His His Glu Pro Ala Gly Glu
            100                 105                 110
Thr Gly Asn Gly Thr Ser Gly Ala Ile Tyr Phe Asp Gln Val Leu Val
        115                 120                 125
Asn Glu Gly Gly Gly Phe Asp Arg Ala Ser
    130                 135         138
```

<210> 765
<211> 168
<212>Amino acid
<213> Homo sapiens

<400> 765

```
Glu Asp Val Lys Ser Tyr Tyr Thr Val His Leu Pro Gln Leu Glu Asn
  1                 5                  10                  15
Ile Asn Ser Gly Glu Thr Arg Thr Ile Ser His Phe His Tyr Thr Thr
             20                  25                  30
Trp Pro Asp Phe Gly Val Pro Gln Ser Pro Ala Ser Phe Leu Asn Phe
         35                  40                  45
Leu Phe Lys Val Arg Glu Ser Gly Ser Leu Asn Pro Asp His Gly Pro
     50                  55                  60
```

```
Val Val Ile His Arg Ser Ala Gly Thr Gly Arg Ser Ser Thr Phe Ser
 65                  70                  75                  80
Val Val His Thr Cys Leu Val Leu Met Glu Lys Gly Asp Asp Ile Asn
                85                  90                  95
Ile Lys Gln Val Leu Leu Asn Ile Arg Lys Phe Gln Met Gly Leu Ile
            100                 105                 110
Gln Thr Pro Asp Gln Leu Arg Phe Ser Tyr Met Ala Ile Thr Glu Gly
        115                 120                 125
Ala Lys Cys Val Lys Gly Asp Ser Ser Ile Gln Lys Arg Trp Lys Glu
    130                 135                 140
Leu Ser Lys Glu Asp Leu Pro Pro Ala Phe Asp His Ser Pro Asn Lys
145                 150                 155                 160
Ile Met Thr Glu Lys Tyr Asn Arg
                165         168
```

<210> 766
<211> 255
<212>Amino acid
<213> Homo sapiens

<400> 766

```
Leu Asn Arg Gln Arg Cys Gly Asp Gln Val Leu Val Pro Gly Thr Gly
  1                 5                  10                  15
Leu Ala Ala Ile Leu Arg Thr Leu Pro Met Phe His Asp Glu Glu His
             20                  25                  30
Ala Arg Ala Arg Gly Leu Ser Glu Asp Thr Leu Val Leu Pro Pro Ala
         35                  40                  45
Ser Arg Asn Gln Arg Ile Leu Tyr Thr Val Leu Glu Cys Gln Pro Leu
     50                  55                  60
Phe Asp Ser Ser Asp Met Thr Ile Ala Glu Trp Val Cys Leu Ala Gln
 65                  70                  75                  80
Thr Ile Lys Arg His Tyr Glu Gln Tyr His Gly Phe Val Val Ile His
                85                  90                  95
Gly Thr Asp Thr Met Ala Phe Ala Ala Ser Met Leu Ser Phe Met Leu
            100                 105                 110
Glu Asn Leu Gln Lys Thr Val Ile Leu Thr Gly Ala Gln Val Pro Ile
        115                 120                 125
His Ala Leu Trp Ser Asp Gly Arg Glu Asn Leu Leu Gly Ala Leu Leu
    130                 135                 140
Met Ala Gly Gln Tyr Val Ile Pro Glu Val Cys Leu Phe Phe Gln Asn
145                 150                 155                 160
Gln Leu Phe Arg Gly Asn Arg Ala Thr Lys Val Asp Ala Arg Arg Phe
                165                 170                 175
Ala Ala Phe Cys Ser Pro Asn Leu Leu Pro Leu Ala Thr Val Gly Ala
            180                 185                 190
Asp Ile Thr Ile Asn Arg Glu Leu Val Arg Lys Val Asp Gly Lys Ala
        195                 200                 205
Gly Leu Val Val His Ser Ser Met Glu Gln Asp Val Gly Leu Leu Arg
    210                 215                 220
Leu Tyr Pro Gly Ile Pro Ala Ala Leu Val Arg Ala Phe Leu Gln Pro
225                 230                 235                 240
Pro Leu Lys Gly Val Val Met Glu Thr Phe Gly Ser Gly Asn Gly
                245                 250                 255
```

<210> 767
<211> 260
<212>Amino acid
<213> Homo sapiens

<400> 767
Leu Phe Arg Leu Ala Pro Gly Phe Leu Arg Ser Leu Ala Arg Gln Gly
1 5 10 15
Tyr His Gln Ile Trp Ala Phe Pro Phe Leu Pro Ser Gly Ala Thr Ala
20 25 30
Thr Trp Pro Ala Ala Ser Arg Ser Arg Ser Leu Ala Ala Arg Ser Leu
35 40 45
Pro Arg Ser Pro Ala Arg Pro Gly Pro Asn Asp Ala Leu Leu Gly Glu
50 55 60
His Asp Phe Arg Gly Gln Gly Val Arg Ala Gln Arg Phe Arg Phe Ser
65 70 75 80
Glu Glu Pro Gly Pro Gly Ala Asp Gly Ala Val Leu Glu Val His Val
85 90 95
Pro Gln Ile Gly Ala Gly Val Ser Leu Pro Gly Ile Leu Ala Ala Lys
100 105 110
Cys Gly Ala Glu Val Ile Leu Ser Asp Ser Ser Glu Leu Pro His Cys
115 120 125
Leu Glu Val Cys Arg Gln Ser Cys Gln Met Asn Asn Leu Pro His Leu
130 135 140
Gln Val Val Gly Leu Thr Trp Gly His Ile Ser Trp Asp Leu Leu Ala
145 150 155 160
Leu Pro Pro Gln Asp Ile Ile Leu Ala Ser Asp Val Phe Phe Glu Pro
165 170 175
Glu Asp Phe Glu Asp Ile Leu Ala Thr Ile Tyr Phe Leu Met His Lys
180 185 190
Asn Pro Lys Val Gln Leu Trp Ser Thr Tyr Gln Val Arg Ser Ala Asp
195 200 205
Trp Ser Leu Glu Ala Leu Leu Tyr Lys Trp Asp Met Lys Cys Val His
210 215 220
Ile Pro Leu Glu Ser Phe Asp Ala Asp Lys Glu Asp Ile Ala Glu Ser
225 230 235 240
Thr Leu Pro Gly Arg His Thr Val Glu Met Leu Val Ile Ser Phe Ala
245 250 255
Lys Asp Ser Leu
260

<210> 768
<211> 200
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(200)
<223> X = any amino acid or stop code

<400> 768
Ser Phe Ile Tyr Lys His Thr His Arg Ala Arg Phe Gly Pro Arg Ala
1 5 10 15
Ile Val Ala Ser Pro Ala Leu Thr Ala Gly Pro His Val Ser Leu Thr
20 25 30
Ala Ser Cys Arg Val Gly Met Trp Val Ser Cys Ser Pro Ser Pro Phe
35 40 45
Leu His Pro Thr Asn Thr Leu Val Ala Val Leu Glu Arg Asp Thr Leu

```
     50                  55                  60
Gly Ile Arg Glu Val Arg Leu Phe Asn Ala Val Val Arg Trp Ser Glu
 65                  70                  75                  80
Ala Glu Cys Gln Arg Gln Gln Leu Gln Val Thr Pro Glu Asn Arg Arg
                85                  90                  95
Lys Val Leu Gly Lys Ala Leu Gly Leu Ile Arg Phe Pro Leu Met Thr
            100                 105                 110
Ile Glu Glu Phe Ala Ala Gly Asn Arg Ala Arg Ala Gln Gly Leu Val
        115                 120                 125
Trp Glu Gly Ser Gly Thr Gln Val Gly Ile Trp Cys Thr Glu Asp Ser
    130                 135                 140
Ala Pro Glu Phe Thr Ala Glu Ser Leu Ala Asp Ala Trp His Ile Gln
145                 150                 155                 160
Ile Gly Arg Asn Leu Ala Cys Glu Asp Ala Ser Thr Trp Ala Ile Cys
                165                 170                 175
Xaa Pro Arg Pro Gly Ser Val Pro Thr Val His Thr Ala Arg Pro Arg
            180                 185                 190
Leu Ser Cys Leu Ser Ser Cys Phe
        195                 200
```

<210> 769
<211> 33
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(33)
<223> X = any amino acid or stop code

<400> 769

```
Met Ala Ser Thr Gln Asp Ala Glu Leu Ala Val Ser Arg Xaa Arg Ala
  1               5                  10                  15
Ile Ala Leu Xaa Pro Gly Xaa Gln Ser Xaa Xaa Pro Ser Gln Lys Lys
             20                  25                  30
Lys
 33
```

<210> 770
<211> 599
<212>Amino acid
<213> Homo sapiens

<400> 770

```
Leu Leu Lys Ser Cys Gly Val Leu Leu Ser Gly Val Cys Ile Pro Cys
  1               5                  10                  15
Glu Gly Lys Gly Pro Thr Val Leu Val Ile Gln Thr Ala Val Pro Gln
             20                  25                  30
Asp Arg Pro Thr Lys Ser Ser Met Arg Ser Ala Ala Lys Pro Trp Asn
         35                  40                  45
Pro Ala Ile Arg Ala Gly Gly His Gly Pro Asp Arg Val Arg Pro Leu
     50                  55                  60
Pro Ala Ala Ser Ser Gly Met Lys Ser Ser Lys Ser Ser Thr Ser Leu
 65                  70                  75                  80
```

```
Ala Phe Glu Ser Arg Leu Ser Arg Leu Lys Arg Ala Ser Ser Glu Asp
                 85                  90                  95
Thr Leu Asn Lys Pro Gly Ser Thr Ala Ala Ser Gly Val Val Arg Leu
            100                 105                 110
Lys Lys Thr Ala Thr Ala Gly Ala Ile Ser Glu Leu Thr Glu Ser Arg
        115                 120                 125
Leu Arg Ser Gly Thr Gly Ala Phe Thr Thr Thr Lys Arg Thr Gly Ile
    130                 135                 140
Pro Ala Pro Arg Glu Phe Ser Val Thr Val Ser Arg Glu Arg Ser Val
145                 150                 155                 160
Pro Arg Gly Pro Ser Asn Pro Arg Lys Ser Val Ser Ser Pro Thr Ser
                165                 170                 175
Ser Asn Thr Pro Thr Pro Thr Lys His Leu Arg Thr Pro Ser Thr Lys
            180                 185                 190
Pro Lys Gln Glu Asn Glu Gly Gly Glu Lys Val Arg Leu Ser Pro Lys
        195                 200                 205
Phe Arg Glu Leu Leu Ala Glu Ala Lys Ala Lys Asp Ser Glu Ile Asn
    210                 215                 220
Arg Leu Arg Ser Glu Leu Lys Lys Tyr Lys Glu Lys Arg Thr Leu Asn
225                 230                 235                 240
Ala Glu Gly Thr Asp Ala Leu Gly Pro Asn Val Asp Gly Thr Ser Val
                245                 250                 255
Ser Pro Gly Asp Thr Glu Pro Met Ile Arg Ala Leu Glu Glu Lys Asn
            260                 265                 270
Lys Asn Phe Gln Lys Glu Leu Ser Asp Leu Glu Glu Glu Asn Arg Val
        275                 280                 285
Leu Lys Glu Lys Leu Ile Tyr Leu Glu His Ser Pro Asn Ser Glu Gly
    290                 295                 300
Ala Ala Ser His Thr Gly Asp Ser Ser Cys Pro Thr Ser Ile Thr Gln
305                 310                 315                 320
Glu Ser Ser Phe Gly Ser Pro Thr Gly Asn Gln Leu Ser Ser Asp Ile
                325                 330                 335
Asp Glu Tyr Lys Lys Asn Ile His Gly Asn Ala Leu Arg Thr Ser Gly
            340                 345                 350
Ser Ser Ser Ser Asp Val Thr Lys Ala Ser Leu Ser Pro Asp Ala Ser
        355                 360                 365
Asp Phe Glu His Ile Thr Ala Glu Thr Pro Ser Arg Pro Leu Ser Ser
    370                 375                 380
Thr Ser Asn Pro Phe Lys Ser Ser Lys Cys Ser Thr Ala Gly Ser Ser
385                 390                 395                 400
Pro Asn Ser Val Ser Glu Leu Ser Leu Ala Ser Leu Thr Glu Lys Ile
                405                 410                 415
Gln Lys Met Glu Glu Asn His His Ser Thr Ala Glu Glu Leu Gln Ala
            420                 425                 430
Thr Leu Gln Glu Leu Ser Asp Gln Gln Gln Met Val Gln Glu Leu Thr
        435                 440                 445
Ala Glu Asn Glu Lys Leu Val Asp Glu Lys Thr Ile Leu Glu Thr Ser
    450                 455                 460
Phe His Gln His Arg Glu Arg Ala Glu Gln Leu Ser Gln Glu Asn Glu
465                 470                 475                 480
Lys Leu Met Asn Leu Leu Gln Glu Arg Val Lys Asn Glu Glu Pro Thr
                485                 490                 495
Thr Gln Glu Gly Lys Ile Ile Glu Leu Glu Gln Lys Cys Thr Gly Ile
            500                 505                 510
Leu Glu Gln Gly Arg Phe Glu Arg Glu Lys Leu Leu Asn Ile Gln Gln
        515                 520                 525
Gln Leu Thr Cys Ser Leu Arg Lys Val Glu Glu Glu Asn Gln Gly Ala
    530                 535                 540
Leu Glu Met Ile Lys Arg Leu Lys Glu Glu Asn Glu Lys Leu Asn Glu
545                 550                 555                 560
Phe Leu Glu Leu Glu Arg His Asn Asn Asn Met Met Ala Lys Thr Leu
                565                 570                 575
Glu Glu Cys Arg Val Thr Leu Glu Gly Leu Lys Met Glu Asn Gly Ser
            580                 585                 590
```

```
Leu Lys Ser His Leu Gln Gly
        595             599
```

<210> 771
<211> 103
<212>Amino acid
<213> Homo sapiens

<400> 771

```
Ser Gln Met His Arg Leu Ile Phe Val Tyr Thr Leu Ile Cys Ala Asn
  1               5                  10                  15
Phe Cys Ser Cys Arg Asp Thr Ser Ala Thr Pro Gln Ser Ala Ser Ile
             20                  25                  30
Lys Ala Leu Arg Asn Ala Asn Leu Arg Arg Asp Glu Ser Asn His Leu
         35                  40                  45
Thr Asp Leu Tyr Arg Arg Asp Glu Thr Ile Gln Val Lys Gly Asn Gly
     50                  55                  60
Tyr Val Gln Ser Pro Arg Phe Pro Asn Ser Tyr Pro Arg Asn Leu Leu
 65                  70                  75                  80
Leu Thr Trp Arg Leu His Ser Gln Glu Asn Thr Arg Ile Gln Leu Val
                 85                  90                  95
Phe Asp Asn Gln Phe Gly Leu
            100         103
```

<210> 772
<211> 218
<212>Amino acid
<213> Homo sapiens

<400> 772

```
Pro Phe Lys Lys Met Thr Asp Leu Leu Arg Ser Val Val Thr Val Ile
  1               5                  10                  15
Asp Val Phe Tyr Lys Tyr Thr Lys Gln Asp Gly Glu Cys Gly Thr Leu
             20                  25                  30
Ser Lys Gly Glu Leu Lys Glu Leu Leu Glu Lys Glu Leu His Pro Val
         35                  40                  45
Leu Lys Asn Pro Asp Asp Pro Asp Thr Val Asp Val Ile Met His Met
     50                  55                  60
Leu Asp Arg Asp His Asp Arg Arg Leu Asp Phe Thr Glu Phe Leu Leu
 65                  70                  75                  80
Met Ile Phe Lys Leu Thr Met Ala Cys Asn Lys Val Leu Ser Lys Glu
                 85                  90                  95
Tyr Cys Lys Ala Ser Gly Ser Lys Lys His Arg Arg Gly His Arg His
            100                 105                 110
Gln Glu Glu Glu Ser Glu Thr Glu Glu Asp Glu Glu Asp Thr Pro Gly
        115                 120                 125
His Lys Ser Gly Tyr Arg His Ser Ser Trp Ser Glu Gly Glu Glu His
    130                 135                 140
Gly Tyr Ser Ser Gly His Ser Arg Gly Thr Val Lys Cys Arg His Gly
145                 150                 155                 160
Ser Asn Ser Arg Arg Leu Gly Arg Gln Gly Asn Leu Ser Ser Ser Gly
                165                 170                 175
Asn Gln Glu Gly Ser Gln Lys Arg Tyr His Arg Ser Ser Cys Gly His
            180                 185                 190
```

```
Ser Trp Ser Gly Gly Lys Asp Arg His Gly Ser Ser Ser Val Glu Leu
        195                 200                 205
Arg Glu Arg Ile Asn Lys Ser His Ile Lys
    210                 215         218
```

<210> 773
<211> 130
<212>Amino acid
<213> Homo sapiens

<400> 773

```
Val Pro Lys Ile Ser Gly Pro Asp His Ile Asp Phe Ile Pro Trp Asp
  1               5                  10                  15
Gln Leu Phe Met Ala Ser Ser Ser Ser Val Thr Glu Phe Leu Val Leu
             20                  25                  30
Gly Phe Ser Ser Leu Gly Glu Leu Gln Leu Val Leu Phe Ala Val Phe
         35                  40                  45
Leu Cys Leu Tyr Leu Ile Ile Leu Ser Gly Asn Ile Ile Ile Ile Ser
     50                  55                  60
Val Ile His Leu Asp His Ser Leu His Thr Pro Met Tyr Phe Phe Leu
 65                  70                  75                  80
Gly Ile Leu Ser Ile Ser Glu Ile Phe Tyr Thr Thr Val Ile Leu Pro
                 85                  90                  95
Lys Met Leu Ile Asn Leu Phe Ser Val Phe Arg Thr Leu Ser Phe Val
            100                 105                 110
Ser Cys Ala Thr Gln Met Phe Tyr Glu Ile Val Gly Pro Gly Thr Gln
        115                 120                 125
Glu Arg
    130
```

<210> 774
<211> 204
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(204)
<223> X = any amino acid or stop code

<400> 774

```
Asp His Ser Thr Glu Thr Pro Gly Ile Pro Ala Ala Glu Pro Val Ser
  1               5                  10                  15
His Gly Thr Gly Lys Leu Glu Arg Ala Pro Thr Leu Pro Ala Gly Ala
             20                  25                  30
Glu Leu Pro Ala Pro Ala Ala Val Pro Cys Pro Thr Leu Xaa Val Cys
         35                  40                  45
Leu Tyr Pro Gln Leu Leu Gly Leu Ser Val Ala Thr Met Val Thr Leu
     50                  55                  60
Thr Tyr Phe Gly Ala His Phe Ala Val Ile Arg Arg Ala Ser Leu Glu
 65                  70                  75                  80
Lys Asn Pro Tyr Gln Ala Val His Gln Trp Gly Thr Gln Gln Arg Leu
                 85                  90                  95
Ile Gln His Pro Glu Ser Gly Ser Glu Gly Gln Ser Leu Leu Gly Pro
```

```
            100                 105                 110
Leu Arg Ala Phe Ser Ala Gly Leu Ser Leu Val Gly Leu Leu Thr Leu
        115                 120                 125
Gly Ala Val Leu Ser Ala Ala Ala Thr Val Arg Glu Ala Gln Gly Leu
    130                 135                 140
Met Ala Gly Gly Phe Leu Cys Phe Ser Leu Ala Phe Cys Ala Gln Val
145                 150                 155                 160
Gln Val Val Phe Trp Arg Leu His Ser Pro Thr Gln Val Glu Asp Ala
                165                 170                 175
Met Leu Asp Thr Tyr Asp Leu Val Tyr Glu Gln Ala Met Lys Gly Thr
            180                 185                 190
Ser His Val Arg Arg Gln Glu Leu Ala Ala Ile Gln
        195                 200             204
```

<210> 775
<211> 121
<212>Amino acid
<213> Homo sapiens

<400> 775

```
Gln Pro Gly Tyr Ser Glu Tyr Asp Lys Asn Arg Gly Gln Gly Met Leu
  1               5                  10                  15
Leu Asn Met Met Cys Gly Arg Gln Leu Ser Ala Ile Ser Leu Cys Leu
            20                  25                  30
Ala Val Thr Phe Ala Pro Leu Phe Asn Ala Gln Ala Asp Glu Pro Glu
        35                  40                  45
Val Ile Pro Gly Asp Ser Pro Val Ala Val Ser Glu Gln Gly Glu Ala
    50                  55                  60
Leu Pro Gln Ala Gln Ala Thr Ala Ile Met Ala Gly Ile Gln Pro Leu
65                  70                  75                  80
Pro Glu Gly Ala Ala Glu Lys Ala Arg Thr Gln Ile Glu Ser Gln Leu
                85                  90                  95
Pro Ala Gly Tyr Lys Pro Val Tyr Leu Asn Gln Leu Gln Leu Leu Tyr
            100                 105                 110
Ala Ala Arg Gly Ile Ser Cys Ser Val
        115                 120 121
```

<210> 776
<211> 142
<212>Amino acid
<213> Homo sapiens

<400> 776

```
Arg Thr Arg Ala Ala Asp Val Tyr Val Phe Ser Leu Thr Gly Lys Ser
  1               5                  10                  15
Arg Asn Val Ser Ser Ser Thr Val Arg Arg Ser Ala Val Gly Gly Met
            20                  25                  30
Ser Ala Leu Ala Leu Phe Asp Leu Leu Lys Pro Asn Tyr Ala Leu Ala
        35                  40                  45
Thr Gln Val Glu Phe Thr Asp Pro Glu Ile Val Ala Glu Tyr Ile Thr
    50                  55                  60
Tyr Pro Ser Pro Asn Gly His Gly Glu Val Arg Gly Tyr Leu Val Lys
65                  70                  75                  80
Pro Ala Lys Met Ser Gly Lys Thr Pro Ala Val Val Val Val His Glu
```

```
                  85                  90                  95
Asn Arg Gly Leu Asn Pro Tyr Ile Glu Asp Val Ala Arg Arg Val Ala
             100                 105                 110
Lys Ala Gly Tyr Ile Ala Leu Ala Pro Asp Gly Leu Ser Ser Val Gly
         115                 120                 125
Gly Tyr Pro Gly Asn Asp Ile Lys Val Val Ser Ala Ala Ala
     130                 135                 140     142
```

<210> 777
<211> 150
<212>Amino acid
<213> Homo sapiens

<400> 777

```
Val Lys Gln Arg His Gly Asn Ser Leu Leu Thr Thr Glu Thr Lys Cys
  1               5                  10                  15
Ile Ser Cys Arg Leu Gly Val Pro Leu Ser Pro Gln Arg Arg Phe Gln
             20                  25                  30
Ala Ile Arg Ile Glu Glu Val Lys Leu Arg Trp Phe Ala Phe Leu Ile
         35                  40                  45
Val Leu Leu Ala Gly Cys Ser Ser Lys His Asp Tyr Thr Asn Pro Pro
     50                  55                  60
Trp Asn Ala Lys Val Pro Val Gln Arg Ala Met Gln Trp Met Pro Ile
 65                  70                  75                  80
Ser Gln Lys Ala Gly Ala Ala Trp Gly Val Asp Pro Gln Leu Ile Thr
                 85                  90                  95
Ala Ile Ile Ala Ile Glu Ser Gly Gly Asn Pro Asn Ala Val Ser Lys
            100                 105                 110
Ser Asn Ala Ile Gly Leu Met Gln Leu Lys Ala Ser Thr Ser Gly Arg
        115                 120                 125
Asp Val Tyr Arg Arg Met Gly Trp Ser Gly Glu Pro Thr Thr Ser Glu
    130                 135                 140
Leu Lys Asn Ser Ser Arg
145                 150
```

<210> 778
<211> 296
<212>Amino acid
<213> Homo sapiens

<400> 778

```
His Ala Ala Gly Ile Arg His Glu Ala Lys Pro Lys Arg Ser Phe Tyr
  1               5                  10                  15
Ala Ala Arg Asp Leu Tyr Lys Tyr Arg His Gln Tyr Pro Asn Phe Lys
             20                  25                  30
Asp Ile Arg Tyr Gln Asn Asp Leu Ser Asn Leu Arg Phe Tyr Lys Asn
         35                  40                  45
Lys Ile Pro Phe Lys Pro Asp Gly Val Tyr Ile Glu Glu Val Leu Ser
     50                  55                  60
Lys Trp Lys Gly Asp Tyr Glu Lys Leu Glu His Asn His Thr Tyr Ile
 65                  70                  75                  80
Gln Trp Leu Phe Pro Leu Arg Glu Gln Gly Leu Asn Phe Tyr Ala Lys
                 85                  90                  95
Glu Leu Thr Thr Tyr Glu Ile Glu Glu Phe Lys Lys Thr Lys Glu Ala
```

```
            100                 105                 110
Ile Arg Arg Phe Leu Leu Ala Tyr Lys Met Met Leu Glu Phe Phe Gly
        115                 120                 125
Ile Lys Leu Thr Asp Lys Thr Gly Asn Val Ala Arg Ala Val Asn Trp
    130                 135                 140
Gln Glu Arg Phe Gln His Leu Asn Glu Ser Gln His Asn Tyr Leu Arg
145                 150                 155                 160
Ile Thr Arg Ile Leu Lys Ser Leu Gly Glu Leu Gly Tyr Glu Ser Phe
                165                 170                 175
Lys Ser Pro Leu Val Lys Phe Ile Leu His Glu Ala Leu Val Glu Asn
            180                 185                 190
Thr Ile Pro Asn Ile Lys Gln Ser Ala Leu Glu Tyr Phe Val Tyr Thr
        195                 200                 205
Ile Arg Asp Arg Arg Glu Arg Arg Lys Leu Leu Arg Phe Ala Gln Lys
    210                 215                 220
His Tyr Thr Pro Ser Glu Asn Phe Ile Trp Gly Pro Pro Arg Lys Glu
225                 230                 235                 240
Gln Ser Glu Gly Ser Lys Ala Gln Lys Met Ser Ser Pro Leu Ala Ser
                245                 250                 255
Ser His Asn Ser Gln Thr Ser Met His Lys Lys Ala Lys Asp Ser Lys
            260                 265                 270
Asn Ser Ser Ser Ala Val His Leu Asn Ser Lys Thr Ala Glu Asp Lys
        275                 280                 285
Lys Val Ala Pro Lys Glu Pro Val
    290                 295 296
```

<210> 779
<211> 90
<212>Amino acid
<213> Homo sapiens

<400> 779

```
Glu Leu Gln Val Phe Gln Pro Ile Gly Gly Met Ser Asp Ser Gly Ser
  1                 5                  10                  15
Gln Leu Gly Ser Met Gly Ser Leu Thr Met Lys Ser Gln Leu Gln Ile
             20                  25                  30
Thr Val Ile Ser Ala Lys Leu Lys Glu Asn Lys Lys Asn Trp Phe Gly
         35                  40                  45
Pro Ser Pro Tyr Val Glu Val Thr Val Asp Gly Gln Ser Lys Lys Thr
     50                  55                  60
Glu Lys Cys Asn Asn Thr Asn Ser Pro Lys Trp Lys Gln Pro Leu Thr
 65                  70                  75                  80
Val Ile Val Thr Pro Val Ser Lys Leu His
                 85                  90
```

<210> 780
<211> 88
<212>Amino acid
<213> Homo sapiens

<400> 780

```
Ile Glu Thr Leu Ser Phe Val Ile Arg Asn Trp Asn Thr His Ala Met
  1                 5                  10                  15
Ser Lys Pro Ile Val Met Glu Arg Gly Val Lys Tyr Arg Asp Ala Asp
```

```
            20                  25                  30
Lys Met Ala Leu Ile Pro Val Lys Asn Val Ala Thr Glu Arg Glu Ala
        35                  40                  45
Leu Leu Arg Lys Pro Glu Trp Met Lys Ile Lys Leu Pro Ala Asp Ser
    50                  55                  60
Thr Arg Ile Gln Gly Ile Lys Ala Ala Met Arg Lys Asn Gly Leu His
65                  70                  75                  80
Ser Val Cys Glu Glu Ala Ser Cys
                85          88
```

<210> 781
<211> 35
<212>Amino acid
<213> Homo sapiens

<400> 781

```
Pro Arg Met Val Leu Gly Lys Pro Gln Thr Asp Pro Thr Leu Glu Trp
 1               5                  10                  15
Phe Leu Ser His Cys His Ile His Lys Tyr Pro Ser Lys Ser Thr Leu
            20                  25                  30
Ile Pro Gln
        35
```

<210> 782
<211> 145
<212>Amino acid
<213> Homo sapiens

<400> 782

```
Gly Leu Arg Ile Ser Val Gln Glu Arg Ile Lys Ala Cys Phe Thr Glu
 1               5                  10                  15
Ser Ile Gln Thr Gln Ile Ala Ala Ala Glu Ala Leu Pro Asp Ala Ile
            20                  25                  30
Ser Arg Ala Ala Met Thr Leu Val Gln Ser Leu Leu Asn Gly Asn Lys
        35                  40                  45
Ile Leu Cys Cys Gly Asn Gly Thr Ser Ala Ala Asn Ala Gln His Phe
    50                  55                  60
Ala Ala Ser Met Ile Asn Arg Phe Glu Thr Glu Arg Pro Ser Leu Pro
65                  70                  75                  80
Ala Ile Ala Leu Asn Thr Asp Asn Val Val Leu Thr Ala Ile Ala Asn
                85                  90                  95
Asp Arg Leu His Asp Glu Val Tyr Ala Lys Gln Val Arg Ala Leu Gly
            100                 105                 110
His Ala Gly Asp Val Leu Leu Ala Ile Ser Thr Arg Gly Asn Ser Arg
        115                 120                 125
Asp Ile Val Lys Ala Val Glu Ala Ala Val Thr Arg Asp Thr Thr Ile
    130                 135                 140
Val
145
```

<210> 783
<211> 102
<212>Amino acid

<213> Homo sapiens

<400> 783

```
Lys Gln Thr Gln His Ala Pro Gly Met Met Lys Lys Tyr Leu Ala Leu
 1               5                  10                  15
Ala Leu Ile Ala Pro Leu Leu Ile Ser Cys Ser Thr Thr Lys Lys Gly
            20                  25                  30
Asp Thr Tyr Asn Glu Ala Trp Val Lys Asp Thr Asn Gly Phe Asp Ile
        35                  40                  45
Leu Met Gly Gln Phe Ala His Asn Ile Glu Asn Ile Trp Gly Phe Lys
    50                  55                  60
Glu Val Val Ile Ala Gly Pro Lys Asp Tyr Val Lys Tyr Thr Asp Gln
65                  70                  75                  80
Tyr Gln Thr Arg Ser His Ile Asn Phe Asp Asp Gly Thr Ile Thr Ile
                85                  90                  95
Glu Pro Ile Pro Gly Thr
            100     102
```

<210> 784
<211> 78
<212>Amino acid
<213> Homo sapiens

<400> 784

```
Thr Asp Arg Thr Ala Leu Asn Pro Gly Gln Glu Ser Ala Met Asn Arg
 1               5                  10                  15
Leu Phe Ser Gly Arg Ser Asp Met Pro Phe Ala Leu Leu Leu Leu Ala
            20                  25                  30
Pro Ser Leu Leu Leu Leu Gly Gly Leu Val Ala Trp Pro Met Val Ser
        35                  40                  45
Asn Ile Glu Ile Ser Phe Leu Arg Leu Pro Leu Asn Pro Asn Ile Glu
    50                  55                  60
Ser Thr Phe Val Gly Val Ser Asn Tyr Val Arg Ile Leu Ser
65                  70                  75          78
```

<210> 785
<211> 148
<212>Amino acid
<213> Homo sapiens

<400> 785

```
Lys Glu Leu Val Asp Glu Lys Ser Glu Arg Gly Arg Ala Met Asp Pro
 1               5                  10                  15
Val Ser Gln Leu Ala Ser Ala Gly Thr Phe Arg Val Leu Lys Glu Pro
            20                  25                  30
Leu Ala Phe Leu Arg Ala Leu Glu Leu Leu Phe Ala Ile Phe Ala Phe
        35                  40                  45
Ala Thr Cys Gly Gly Tyr Ser Gly Gly Leu Arg Leu Ser Val Asp Cys
    50                  55                  60
Val Asn Lys Thr Glu Ser Asn Leu Ser Ile Asp Ile Ala Phe Ala Tyr
```

```
 65                  70                  75                  80
Pro Phe Arg Leu His Gln Val Thr Phe Glu Val Pro Thr Cys Glu Gly
                 85                  90                  95
Lys Glu Arg Gln Lys Leu Ala Leu Ile Gly Asp Ser Ser Ser Ser Ala
            100                 105                 110
Glu Phe Phe Val Thr Val Ala Val Phe Ala Phe Leu Tyr Ser Leu Ala
        115                 120                 125
Ala Thr Gly Arg Tyr Ile Phe Phe His Asn Lys Asn Arg Glu Asn Asn
    130                 135                 140
Arg Gly Pro Leu
145         148
```

<210> 786
<211> 246
<212>Amino acid
<213> Homo sapiens

<400> 786

```
Leu Gly Thr Val Ser Tyr Gly Ala Asp Thr Met Asp Glu Ile Gln Ser
  1                 5                  10                  15
His Val Arg Asp Ser Tyr Ser Gln Met Gln Ser Gln Ala Gly Gly Asn
             20                  25                  30
Asn Thr Gly Ser Thr Pro Leu Arg Lys Ala Gln Ser Ser Ala Pro Lys
         35                  40                  45
Val Arg Lys Ser Val Ser Ser Arg Ile His Glu Ala Val Lys Ala Ile
     50                  55                  60
Val Leu Cys His Asn Val Thr Pro Val Tyr Glu Ser Arg Ala Gly Val
 65                  70                  75                  80
Thr Glu Glu Thr Glu Phe Ala Glu Ala Asp Gln Asp Phe Ser Asp Glu
                 85                  90                  95
Asn Arg Thr Tyr Gln Ala Ser Ser Pro Asp Glu Val Ala Leu Val Gln
            100                 105                 110
Trp Thr Glu Ser Val Gly Leu Thr Leu Val Ser Arg Asp Leu Thr Ser
        115                 120                 125
Met Gln Leu Lys Thr Pro Ser Gly Gln Val Leu Ser Phe Cys Ile Leu
    130                 135                 140
Gln Leu Phe Pro Phe Thr Ser Glu Ser Lys Arg Met Gly Val Ile Val
145                 150                 155                 160
Arg Asp Glu Ser Thr Ala Glu Ile Thr Phe Tyr Met Lys Gly Ala Asp
                165                 170                 175
Val Ala Met Ser Pro Ile Val Gln Tyr Asn Asp Trp Leu Glu Glu Glu
            180                 185                 190
Cys Gly Asn Met Ala Arg Glu Gly Leu Arg Thr Leu Val Val Ala Lys
        195                 200                 205
Lys Ala Leu Thr Glu Glu Gln Tyr Gln Asp Phe Glu Val Ser Arg Leu
    210                 215                 220
Pro Gly Ile Pro Ser Ser Tyr Asp Gly Ala Phe Leu Thr Leu Lys Leu
225                 230                 235                 240
Val Leu Pro Val Phe Val
                245 246
```

<210> 787
<211> 176
<212>Amino acid
<213> Homo sapiens

<400> 787

```
Glu Gly Pro His Arg Arg Leu Phe Gln Met Val Lys Ala Leu Gln Glu
 1               5                  10                  15
Ala Pro Glu Asp Pro Asn Gln Ile Leu Ile Gly Tyr Ser Arg Gly Leu
            20                  25                  30
Val Val Ile Trp Asp Leu Gln Gly Ser Arg Val Leu Tyr His Phe Leu
        35                  40                  45
Ser Ser Gln Gln Leu Glu Asn Ile Trp Trp Gln Arg Asp Gly Arg Leu
    50                  55                  60
Leu Val Ser Cys His Ser Asp Gly Ser Tyr Cys Gln Trp Pro Val Ser
65                  70                  75                  80
Ser Glu Ala Gln Gln Pro Glu Pro Leu Arg Ser Leu Val Pro Tyr Gly
                85                  90                  95
Pro Phe Pro Cys Lys Ala Ile Thr Arg Ile Leu Trp Leu Thr Thr Arg
            100                 105                 110
Gln Gly Leu Pro Phe Thr Ile Phe Gln Gly Gly Met Pro Arg Ala Ser
        115                 120                 125
Tyr Gly Asp Arg His Cys Ile Ser Val Ile His Asp Gly Gln Gln Thr
    130                 135                 140
Ala Phe Asp Phe Thr Ser Arg Val Ile Gly Phe Thr Val Leu Thr Glu
145                 150                 155                 160
Ala Asp Pro Ala Ala Ser Arg Arg Ala Ser Gly Val Gly Ala Gln Gly
                165                 170                 175 176
```

<210> 788
<211> 180
<212>Amino acid
<213> Homo sapiens

<400> 788

```
Lys Gln Gly Leu Glu Val Arg Asp Leu His Phe Lys Glu Ile Thr Ser
 1               5                  10                  15
Gly Arg Ala Leu Leu Arg Val Ala Cys Lys Arg Pro Ser Met Val Pro
            20                  25                  30
Gly Gly Gln Leu Gln Arg Ala Gly Ala Gly Ala Gln Ala Arg Ile Thr
        35                  40                  45
Gly Leu Ser Pro Ala Leu Trp Gly Ala Arg Val His Gly Trp Ile Pro
    50                  55                  60
Glu Leu Pro Ala Gly Leu Pro Pro Gly Ala Cys Leu Trp Pro Leu Ile
65                  70                  75                  80
Pro Ala Cys Pro Ser Arg His Trp Gly Trp Val Ser Ala Pro Val Lys
                85                  90                  95
Gly Trp Ala Gln Ala Ile Leu Gly Leu Ala Leu Cys Leu Arg Gly Glu
            100                 105                 110
His Arg Gly Leu Gly Ala Gly Val Ser Lys Val Arg Ser Leu Lys Met
        115                 120                 125
Asp Arg Lys Val Trp Thr Glu Thr Leu Ile Glu Val Gly Met Pro Leu
    130                 135                 140
Leu Ala Thr Asp Thr Trp Gly Leu Pro His Ser Thr Ala Val Trp Val
145                 150                 155                 160
Ser Gln Pro Pro Pro Tyr Leu Ser Asp His Ser Thr Leu Glu Leu Glu
                165                 170                 175
Arg Asp Pro Leu
            180
```

<210> 789
<211> 145
<212>Amino acid
<213> Homo sapiens

<400> 789

```
Leu Ser Cys Asn Ser Glu Gln Ala Leu Leu Ser Leu Val Pro Val Gln
 1               5                  10                  15
Arg Glu Leu Leu Arg Arg Arg Tyr Gln Ser Ser Pro Ala Lys Pro Asp
            20                  25                  30
Ser Ser Phe Tyr Lys Gly Leu Gly Thr Cys Pro Ser Gln Leu Arg Leu
        35                  40                  45
Ser Glu Pro Pro Pro Thr Pro Arg His Leu Ser Val Ala Ser Val Ser
    50                  55                  60
His His Met Phe Pro Ser His Arg Ser Leu Cys Pro His Leu Pro Asp
65                  70                  75                  80
Phe Phe Ala Ala Pro Phe Pro Ser Asp Asn Leu Pro Tyr Thr Leu Gln
                85                  90                  95
Ser Pro Phe Pro Ser Pro Pro Pro Ala Thr Pro Ser Asp His Ala Leu
            100                 105                 110
Ile Leu His His Asp Leu Asn Gly Gly Pro Asp Asp Pro Leu Gln Gln
        115                 120                 125
Thr Gly Gln Leu Phe Gly Gly Leu Val Arg Asp Ile Arg Arg Arg Tyr
    130                 135                 140
Pro
145
```

<210> 790
<211> 65
<212>Amino acid
<213> Homo sapiens

<400> 790

```
Ser Pro Ser Ser Lys Leu Val Gly Met Trp Trp Ala Gly Arg Ala Gly
 1               5                  10                  15
Ser Ser Arg Thr Thr Ser Val Ser Leu Leu Cys Leu Pro Ser Ala Pro
            20                  25                  30
Phe Gly Ala Ser Asn Leu Leu Val Asn Pro Leu Glu Pro Gln Asn Ala
        35                  40                  45
Asp Lys Ile Lys Ile Lys Ile Ala Asp Leu Gly Asn Ala Cys Trp Val
    50                  55                  60
Val
65
```

<210> 791
<211> 144
<212>Amino acid
<213> Homo sapiens

<400> 791

```
Arg Val Asp Pro Arg Val Arg Ala Pro Arg Cys Gly Asp Lys Ile Lys
 1               5                  10                  15
Asn His Met Tyr Lys Cys Asp Cys Gly Ser Leu Lys Asp Cys Ala Ser
            20                  25                  30
Asp Arg Cys Cys Glu Thr Ser Cys Thr Leu Ser Leu Gly Ser Val Cys
        35                  40                  45
Asn Thr Gly Leu Cys Cys His Lys Cys Lys Tyr Ala Ala Pro Gly Val
    50                  55                  60
Val Cys Arg Asp Leu Gly Gly Ile Cys Asp Leu Pro Glu Tyr Cys Asp
65                  70                  75                  80
Gly Lys Lys Glu Glu Cys Pro Asn Asp Ile Tyr Ile Gln Asp Gly Thr
                85                  90                  95
Pro Cys Ser Ala Val Ser Val Cys Ile Arg Gly Asn Cys Ser Asp Arg
            100                 105                 110
Asp Met Gln Cys Gln Ala Leu Phe Gly Tyr Gln Val Lys Asp Gly Ser
        115                 120                 125
Pro Ala Cys Tyr Arg Lys Leu Asn Arg Ile Gly Asn Arg Phe Gly Thr
    130                 135                 140                 144
```

<210> 792
<211> 242
<212>Amino acid
<213> Homo sapiens

<400> 792

```
Pro Gly Arg Pro Thr Arg Pro Asp Ala Ser Leu Ala Gln Asp Pro Arg
 1               5                  10                  15
Thr Thr Met Phe Arg Ile Pro Glu Phe Lys Trp Ser Pro Met His Gln
            20                  25                  30
Arg Leu Leu Thr Asp Leu Leu Phe Ala Leu Glu Thr Asp Val His Val
        35                  40                  45
Trp Arg Ser His Ser Thr Lys Ser Val Met Asp Phe Val Asn Ser Asn
    50                  55                  60
Glu Asn Ile Ile Phe Val His Asn Thr Ile His Leu Ile Ser Gln Met
65                  70                  75                  80
Val Asp Asn Ile Ile Ile Ala Cys Gly Gly Ile Leu Pro Leu Leu Ser
                85                  90                  95
Ala Ala Thr Ser Pro Thr Gly Ser Lys Thr Glu Leu Glu Asn Ile Glu
            100                 105                 110
Val Thr Gln Gly Met Ser Ala Glu Thr Ala Val Thr Phe Leu Ser Arg
        115                 120                 125
Leu Met Ala Met Val Asp Val Leu Val Phe Ala Ser Ser Leu Asn Phe
    130                 135                 140
Ser Glu Ile Glu Ala Glu Lys Asn Met Ser Ser Gly Gly Leu Met Arg
145                 150                 155                 160
Gln Cys Leu Lys Leu Val Cys Cys Val Ala Val Arg Asn Cys Leu Glu
                165                 170                 175
Cys Arg Gln Arg Gln Arg Asp Arg Gly Asn Lys Ser Ser His Gly Ser
            180                 185                 190
Ser Lys Pro Gln Glu Val Pro Gln Ser Val Thr Ala Thr Ala Ala Ser
        195                 200                 205
Lys Thr Pro Leu Glu Asn Val Pro Gly Asn Leu Ser Pro Ile Lys Asp
    210                 215                 220
Pro Asp Arg Leu Leu Gln Asp Val Asp Ile Asn Arg Leu Arg Ala Val
225                 230                 235                 240
Val Phe
```

242

<210> 793
<211> 412
<212>Amino acid
<213> Homo sapiens

<400> 793

```
Asn Ser Ser Gly Val Lys Leu Leu Gln Ala Leu Gly Leu Ser Pro Gly
  1               5                  10                  15
Asn Gly Lys Asp His Ser Ile Leu His Ser Arg Asn Asp Leu Glu Glu
            20                  25                  30
Ala Phe Ile His Phe Met Gly Lys Gly Ala Ala Ala Glu Arg Phe Phe
        35                  40                  45
Ser Asp Lys Glu Thr Phe His Asp Ile Ala Gln Val Ala Ser Glu Phe
    50                  55                  60
Pro Gly Ala Gln His Tyr Val Gly Gly Asn Ala Ala Leu Ile Gly Gln
65                  70                  75                  80
Lys Phe Ala Ala Asn Ser Asp Leu Lys Val Leu Leu Cys Gly Pro Val
                85                  90                  95
Gly Pro Lys Leu His Glu Leu Leu Asp Asp Asn Val Phe Val Pro Pro
            100                 105                 110
Glu Ser Leu Gln Glu Val Asp Glu Phe His Leu Ile Leu Glu Tyr Gln
        115                 120                 125
Ala Gly Glu Glu Trp Gly Gln Leu Lys Ala Pro His Ala Asn Arg Phe
    130                 135                 140
Ile Phe Ser His Asp Leu Ser Asn Gly Ala Met Asn Met Leu Glu Val
145                 150                 155                 160
Phe Val Ser Ser Leu Glu Glu Phe Gln Pro Asp Leu Gly Gly Leu Ser
                165                 170                 175
Gly Leu His Met Met Glu Gly Gln Ser Lys Glu Leu Gln Arg Lys Arg
            180                 185                 190
Leu Leu Glu Val Val Thr Ser Ile Ser Asp Ile Pro Thr Gly Ile Pro
        195                 200                 205
Val His Leu Glu Leu Gly Ser Met Thr Asn Arg Glu Leu Met Ser Ser
    210                 215                 220
Ile Val Leu Gln Gln Val Phe Pro Ala Val Thr Ser Leu Gly Leu Asn
225                 230                 235                 240
Glu Gln Glu Leu Leu Phe Leu Thr Gln Ser Ala Ser Gly Pro His Ser
                245                 250                 255
Ser Leu Ser Ser Trp Asn Gly Val Pro Asp Val Gly Met Val Ser Asp
            260                 265                 270
Ile Leu Phe Trp Ile Leu Lys Glu His Gly Arg Ser Lys Ser Arg Ala
        275                 280                 285
Ser Asp Leu Thr Arg Ile His Phe His Thr Leu Val Tyr His Ile Leu
    290                 295                 300
Ala Thr Val Asp Gly His Trp Ala Asn Gln Leu Ala Ala Val Ala Ala
305                 310                 315                 320
Gly Ala Arg Val Ala Gly Thr Gln Ala Cys Ala Thr Glu Thr Ile Asp
                325                 330                 335
Thr Ser Arg Val Ser Leu Arg Ala Pro Gln Glu Phe Met Thr Ser His
            340                 345                 350
Ser Glu Ala Gly Ser Arg Ile Val Leu Asn Pro Asn Lys Pro Val Val
        355                 360                 365
Glu Trp His Arg Glu Gly Ile Ser Phe His Phe Thr Pro Val Leu Val
    370                 375                 380
Cys Lys Asp Pro Ile Arg Thr Val Gly Leu Gly Asp Ala Ile Ser Ala
385                 390                 395                 400
Glu Gly Leu Phe Tyr Ser Glu Val His Pro His Tyr
```

405 410 412

<210> 794
<211> 83
<212>Amino acid
<213> Homo sapiens

<400> 794

```
Asp Asp Ser Ser Gly Trp Gly Leu Glu Gln Leu Val Val Arg Trp Ser
 1               5                  10                  15
Leu Ala Leu Trp Pro Arg Leu Glu Cys Ser Gly Met Ile Ser Ala His
            20                  25                  30
Cys Asn Leu Cys Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala Pro
        35                  40                  45
Arg Val Ala Gly Ile Thr Asp Val Cys His His Ala Trp Leu Val Phe
    50                  55                  60
Val Phe Leu Val Val Met Gly Phe Pro His Val Gly His Val Gly Leu
65                  70                  75                  80
Glu Leu Leu
        83
```

<210> 795
<211> 391
<212>Amino acid
<213> Homo sapiens

<400> 795

```
Leu Gly Glu Val Leu Lys Cys Gln Gln Gly Val Ser Ser Leu Ala Phe
 1               5                  10                  15
Ala Leu Ala Phe Leu Gln Arg Met Asp Met Lys Pro Leu Val Val Leu
            20                  25                  30
Gly Leu Pro Ala Pro Thr Ala Pro Ser Gly Cys Leu Ser Phe Trp Glu
        35                  40                  45
Ala Lys Ala Gln Leu Ala Lys Ser Cys Lys Val Leu Val Asp Ala Leu
    50                  55                  60
Arg His Asn Ala Ala Ala Ala Val Pro Phe Phe Gly Gly Gly Ser Val
65                  70                  75                  80
Leu Arg Ala Ala Glu Pro Ala Pro His Ala Ser Tyr Gly Gly Ile Val
                85                  90                  95
Ser Val Glu Thr Asp Leu Leu Gln Trp Cys Leu Glu Ser Gly Ser Ile
            100                 105                 110
Pro Ile Leu Cys Pro Ile Gly Glu Thr Ala Ala Arg Arg Ser Val Leu
        115                 120                 125
Leu Asp Ser Leu Glu Val Thr Ala Ser Leu Ala Lys Ala Leu Arg Pro
    130                 135                 140
Thr Lys Ile Ile Phe Leu Asn Asn Thr Gly Gly Leu Arg Asp Ser Ser
145                 150                 155                 160
His Lys Val Leu Ser Asn Val Asn Leu Pro Ala Asp Leu Asp Leu Val
                165                 170                 175
Cys Asn Ala Glu Trp Val Ser Thr Lys Glu Arg Gln Gln Met Arg Leu
            180                 185                 190
Ile Val Asp Val Leu Ser Arg Leu Pro His His Ser Ser Ala Val Ile
        195                 200                 205
Thr Ala Ala Ser Thr Leu Leu Thr Glu Leu Phe Ser Asn Lys Gly Ser
```

```
    210                 215                 220
Gly Thr Leu Phe Lys Asn Ala Glu Arg Met Leu Arg Val Arg Ser Leu
225                 230                 235                 240
Asp Lys Leu Asp Gln Gly Arg Leu Val Asp Leu Val Asn Ala Ser Phe
                245                 250                 255
Gly Lys Lys Leu Arg Asp Asp Tyr Leu Ala Ser Leu Arg Pro Arg Leu
            260                 265                 270
His Ser Ile Tyr Val Ser Glu Gly Tyr Asn Ala Ala Ala Ile Leu Thr
        275                 280                 285
Met Glu Pro Val Leu Gly Gly Thr Pro Tyr Leu Asp Lys Phe Val Val
    290                 295                 300
Ser Ser Ser Arg Gln Gly Gln Gly Ser Gly Gln Met Leu Trp Glu Cys
305                 310                 315                 320
Leu Arg Arg Asp Leu Gln Thr Leu Phe Trp Arg Ser Arg Val Thr Asn
                325                 330                 335
Pro Ile Asn Pro Trp Tyr Phe Lys His Ser Asp Gly Ser Phe Ser Asn
            340                 345                 350
Lys Gln Trp Ile Phe Phe Trp Phe Gly Leu Ala Asp Ile Arg Asp Ser
        355                 360                 365
Tyr Glu Leu Val Asn His Ala Lys Gly Leu Pro Asp Ser Phe His Lys
    370                 375                 380
Pro Ala Ser Asp Pro Gly Ser
385                 390 391
```

<210> 796
<211> 127
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(127)
<223> X = any amino acid or stop code

<400> 796

```
Tyr His Ala Pro Ala Leu Gln Pro Gly Gln Gln Ser Lys Thr Leu Ser
  1               5                  10                  15
Gln Glu Lys Lys Asn Phe Phe Arg Pro Gly Ala Val Ala His Thr Cys
            20                  25                  30
Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly
        35                  40                  45
Asp Arg Asp His Pro Gly Xaa His Gly Glu Thr Pro Ser Leu Leu Lys
    50                  55                  60
Ile Gln Lys Lys Leu Ala Gly Arg Asp Gly Gly Arg Leu Xaa Ser Gln
65                  70                  75                  80
Leu Leu Gly Arg Leu Arg Gln Glu Asn Gly Val Asn Pro Gly Gly Gly
                85                  90                  95
Gly Cys Ser Glu Pro Arg Leu Arg His Cys Thr Pro Ala Trp Xaa Gln
            100                 105                 110
Ser Glu Thr Ile Ser Arg Lys Lys Arg Lys Lys Glu Arg Lys Tyr
        115                 120                 125     127
```

<210> 797
<211> 159
<212>Amino acid
<213> Homo sapiens

<400> 797

```
Phe Arg Pro Ile Gly Ile Ile Arg Gln Ala Leu Cys Ser Ala Asp Gly
 1               5                  10                  15
His Gln Arg Arg Ile Leu Thr Leu Arg Leu Gly Leu Leu Val Ile Pro
            20                  25                  30
Phe Leu Pro Ala Ser Asn Leu Phe Phe Arg Val Gly Phe Val Val Pro
        35                  40                  45
Ser Val Gly Cys Cys Val Met Leu Leu Phe Gly Phe Gly Ala Leu Arg
    50                  55                  60
Lys His Thr Glu Lys Lys Lys Leu Ile Ala Ala Val Val Leu Gly Ile
65                  70                  75                  80
Leu Leu Ser Asn Asp Ala Glu Arg Leu Arg Cys Ala Val Arg Gly Gly
                85                  90                  95
Glu Trp Arg Ser Glu Glu Ala Val Phe Arg Gly Ala Val Ser Val Cys
            100                 105                 110
Pro Leu Ser Ala Glu Val Arg Cys Asn Ile Gly Arg Asn Leu Ala Ala
        115                 120                 125
Lys Gly Asn Gln Thr Gly Ala Ile Arg Tyr His Arg Glu Ala Val Ser
    130                 135                 140
Leu Asn Pro Lys Thr Lys Ser Ser Thr Arg Glu Phe Arg Pro Cys
145                 150                 155             159
```

<210> 798
<211> 236
<212>Amino acid
<213> Homo sapiens

<400> 798

```
Lys Ile Ala Asp Phe Gly Phe Ser Asn Leu Phe Thr Pro Gly Gln Leu
 1               5                  10                  15
Leu Lys Thr Trp Cys Gly Ser Pro Pro Tyr Ala Ala Pro Glu Leu Phe
            20                  25                  30
Glu Gly Lys Glu Tyr Asp Gly Pro Lys Val Asp Ile Trp Ser Leu Gly
        35                  40                  45
Val Val Leu Tyr Val Leu Val Cys Gly Ala Leu Pro Phe Asp Gly Ser
    50                  55                  60
Thr Leu Gln Asn Leu Arg Ala Arg Val Leu Ser Gly Lys Phe Arg Ile
65                  70                  75                  80
Pro Phe Phe Met Ser Thr Glu Cys Glu His Leu Ile Arg His Met Leu
                85                  90                  95
Val Leu Asp Pro Asn Lys Arg Leu Ser Met Glu Gln Ile Cys Lys His
            100                 105                 110
Lys Trp Met Lys Leu Gly Asp Ala Asp Pro Asn Phe Asp Arg Leu Ile
        115                 120                 125
Ala Glu Cys Gln Gln Leu Lys Glu Glu Arg Gln Val Asp Pro Leu Asn
    130                 135                 140
Glu Asp Val Leu Leu Ala Met Glu Asp Met Gly Leu Asp Lys Glu Gln
145                 150                 155                 160
Thr Leu Gln Ser Leu Arg Ser Asp Ala Tyr Asp His Tyr Ser Ala Ile
                165                 170                 175
Tyr Ser Leu Leu Cys Asp Arg His Lys Arg His Lys Thr Leu Arg Leu
            180                 185                 190
Gly Ala Leu Pro Ser Met Pro Arg Ala Leu Gly Leu Ser Ser Thr Ser
        195                 200                 205
Gln Tyr Pro Ala Glu Gln Ala Gly Thr Ala Met Asn Ile Ser Val Pro
    210                 215                 220
```

```
Gln Val Gln Leu Ile Asn Pro Glu Asn Gln Ile Val
225                 230                 235 236
```

<210> 799
<211> 114
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(114)
<223> X = any amino acid or stop code

<400> 799

```
Ala Arg Glu Phe Leu Gly His Arg Ala Ser Ile Thr Trp Ser Xaa Ala
  1               5                  10                  15
Arg Val His His Arg Phe Pro Lys Ala Glu Val Ala Xaa Pro Ser Leu
             20                  25                  30
Leu Arg Thr Asp Leu Thr Glu Asp Arg Thr Lys Cys Cys His Gly Asp
         35                  40                  45
Leu Leu Glu Cys Ala Asp Asp Arg Ala Asp Leu Val Glu Asp Ile Trp
     50                  55                  60
Glu Asn Gln Asp Ser Ile Ser Thr Ile Leu Ile Glu Cys Cys Glu Lys
 65                  70                  75                  80
Pro Leu Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu
                 85                  90                  95
Met Pro Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys
            100                 105                 110
Asp Val
    114
```

<210> 800
<211> 328
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> X = any amino acid or stop code

<400> 800

```
Val Pro Pro Lys Met Lys Arg Gly Thr Ser Leu His Ser Arg Arg Gly
  1               5                  10                  15
Lys Pro Glu Ala Pro Lys Gly Ser Pro Gln Ile Asn Arg Lys Ser Gly
             20                  25                  30
Gln Glu Met Thr Ala Val Met Gln Ser Gly Arg Pro Arg Ser Ser Ser
         35                  40                  45
Thr Thr Asp Ala Pro Thr Gly Ser Ala Met Met Glu Ile Ala Cys Ala
     50                  55                  60
Ala Ala Ala Ala Ala Ala Cys Leu Pro Gly Glu Glu Gly Thr Ala
 65                  70                  75                  80
Glu Arg Ile Glu Arg Leu Glu Val Ser Ser Leu Ala Gln Thr Ser Ser
                 85                  90                  95
```

```
Ala Val Ala Ser Ser Thr Asp Gly Ser Ile His Thr Asp Ser Val Asp
            100                 105                 110
Gly Thr Pro Asp Pro Gln Arg Thr Lys Ala Ala Ile Ala His Leu Gln
        115                 120                 125
Gln Lys Ile Leu Lys Leu Thr Glu Gln Ile Lys Ile Ala Gln Thr Ala
    130                 135                 140
Arg Arg Asn Arg Arg Pro Gly Ser Xaa Lys Asp Cys Thr Pro Xaa Lys
145                 150                 155                 160
Cys Leu Arg Lys Ser Asp Glu Ala Leu Asn Arg Val Leu Gln Gln Ile
                165                 170                 175
Arg Val Pro Pro Lys Met Lys Arg Gly Thr Ser Leu His Ser Arg Arg
            180                 185                 190
Gly Lys Pro Glu Ala Pro Lys Gly Ser Pro Gln Ile Asn Arg Lys Ser
        195                 200                 205
Gly Gln Glu Met Thr Ala Val Met Gln Ser Gly Arg Pro Arg Ser Ser
    210                 215                 220
Ser Thr Thr Asp Ala Pro Thr Gly Ser Ala Met Met Glu Ile Ala Cys
225                 230                 235                 240
Ala Ala Ala Ala Ala Ala Ala Ala Cys Leu Pro Gly Glu Glu Gly Thr
                245                 250                 255
Ala Glu Arg Ile Glu Arg Leu Glu Val Ser Ser Leu Ala Gln Thr Ser
            260                 265                 270
Ser Ala Val Ala Ser Ser Thr Asp Gly Ser Ile His Thr Asp Ser Val
        275                 280                 285
Asp Gly Thr Pro Asp Pro Gln Arg Thr Lys Ala Ala Ile Ala His Leu
    290                 295                 300
Gln Gln Lys Ile Leu Lys Leu Thr Glu Gln Ile Lys Ile Ala Gln Thr
305                 310                 315                 320
Ala Arg Arg Asn Arg Arg Pro Gly
                325                 328
```

<210> 801
<211> 356
<212>Amino acid
<213> Homo sapiens

<400> 801

```
Met Gln Thr Ile Glu Arg Leu Val Lys Glu Arg Asp Asp Leu Met Ser
  1                 5                  10                  15
Ala Leu Val Ser Val Arg Ser Ser Leu Ala Asp Thr Gln Gln Arg Glu
             20                  25                  30
Ala Ser Ala Tyr Glu Gln Val Lys Gln Val Leu Gln Ile Ser Glu Glu
         35                  40                  45
Ala Asn Phe Glu Lys Thr Lys Ala Leu Ile Gln Cys Asp Gln Leu Arg
     50                  55                  60
Lys Glu Leu Glu Arg Gln Ala Glu Arg Leu Glu Lys Glu Leu Ala Ser
 65                  70                  75                  80
Gln Gln Glu Lys Arg Ala Ile Glu Lys Asp Met Met Lys Lys Glu Ile
                 85                  90                  95
Thr Lys Glu Arg Glu Tyr Met Gly Ser Lys Met Leu Ile Leu Ser Gln
            100                 105                 110
Asn Ile Ala Gln Leu Glu Ala Gln Val Glu Lys Val Thr Lys Glu Lys
        115                 120                 125
Ile Ser Ala Ile Asn Gln Leu Glu Glu Ile Gln Ser Gln Leu Ala Ser
    130                 135                 140
Arg Glu Met Asp Val Thr Lys Val Cys Gly Glu Met Arg Tyr Gln Leu
145                 150                 155                 160
Asn Lys Thr Asn Met Glu Lys Asp Glu Ala Glu Lys Glu His Arg Glu
                165                 170                 175
```

```
Phe Arg Ala Lys Thr Asn Arg Asp Leu Glu Ile Lys Asp Gln Glu Ile
            180                 185                 190
Glu Lys Leu Arg Ile Glu Leu Asp Glu Ser Lys Gln His Leu Glu Gln
        195                 200                 205
Glu Gln Gln Lys Ala Ala Leu Ala Arg Glu Glu Cys Leu Arg Leu Thr
    210                 215                 220
Glu Leu Leu Gly Glu Ser Glu His Gln Leu His Leu Thr Arg Gln Glu
225                 230                 235                 240
Lys Asp Ser Ile Gln Gln Ser Phe Ser Lys Glu Ala Lys Ala Gln Ala
                245                 250                 255
Leu Gln Ala Gln Gln Arg Glu Gln Glu Leu Thr Gln Lys Ile Gln Gln
            260                 265                 270
Met Glu Ala Gln His Asp Lys Thr Glu Asn Glu Gln Tyr Leu Leu Leu
        275                 280                 285
Thr Ser Gln Asn Thr Phe Leu Thr Lys Leu Lys Glu Glu Cys Cys Thr
    290                 295                 300
Leu Ala Lys Lys Leu Glu Gln Ile Ser Gln Lys Thr Arg Ser Glu Ile
305                 310                 315                 320
Ala Gln Leu Ser Gln Glu Lys Arg Tyr Thr Tyr Asp Lys Leu Gly Lys
                325                 330                 335
Leu Gln Arg Arg Asn Glu Glu Leu Glu Glu Gln Cys Val Gln His Gly
            340                 345                 350
Arg Ser Thr  *
        355
```

<210> 802
<211> 210
<212>Amino acid
<213> Homo sapiens

<400> 802

```
Ser Tyr Pro Val Trp Trp Asn Ser Pro Leu Thr Ala Glu Val Pro Pro
  1               5                  10                  15
Glu Leu Leu Ala Ala Ala Gly Phe Phe His Thr Gly His Gln Asp Lys
            20                  25                  30
Val Arg Cys Phe Phe Cys Tyr Gly Gly Leu Gln Ser Trp Lys Arg Gly
        35                  40                  45
Asp Asp Pro Trp Thr Glu His Ala Lys Trp Phe Pro Ser Cys Gln Phe
    50                  55                  60
Leu Leu Arg Ser Lys Gly Arg Asp Phe Val His Ser Val Gln Glu Thr
65                  70                  75                  80
His Ser Gln Leu Leu Gly Ser Trp Asp Pro Trp Glu Glu Pro Glu Asp
                85                  90                  95
Ala Ala Pro Val Ala Pro Ser Val Pro Ala Ser Gly Tyr Pro Glu Leu
            100                 105                 110
Pro Thr Pro Arg Arg Glu Val Gln Ser Glu Ser Ala Gln Glu Pro Gly
        115                 120                 125
Gly Val Ser Pro Ala Glu Ala Gln Arg Ala Trp Trp Val Leu Glu Pro
    130                 135                 140
Pro Gly Ala Arg Asp Val Glu Ala Gln Leu Arg Arg Leu Gln Glu Glu
145                 150                 155                 160
Arg Thr Cys Lys Val Cys Leu Asp Arg Ala Val Ser Ile Val Phe Val
                165                 170                 175
Pro Cys Gly His Leu Val Cys Ala Glu Cys Ala Pro Gly Leu Gln Leu
            180                 185                 190
Cys Pro Ile Cys Arg Ser Pro Cys Gly Pro Leu Arg Pro Cys Leu Trp
        195                 200                 205
Val Pro
    210
```

<210> 803
<211> 130
<212>Amino acid
<213> Homo sapiens

<400> 803

```
Met Cys Ser Tyr Arg Glu Lys Lys Ala Glu Pro Gln Glu Leu Leu Gln
  1               5                  10                  15
Leu Asp Gly Tyr Thr Val Asp Tyr Thr Asp Pro Gln Pro Gly Leu Glu
            20                  25                  30
Gly Gly Arg Ala Phe Phe Asn Ala Val Lys Glu Gly Asp Thr Val Ile
        35                  40                  45
Phe Ala Ser Asp Asp Glu Gln Asp Arg Ile Leu Trp Val Gln Ala Met
    50                  55                  60
Tyr Arg Ala Thr Gly Gln Ser His Lys Pro Val Pro Pro Thr Gln Val
65                  70                  75                  80
Gln Lys Leu Asn Ala Lys Gly Gly Asn Val Pro Gln Leu Asp Ala Pro
                85                  90                  95
Ile Ser Gln Phe Tyr Ala Asp Arg Ala Gln Lys His Gly Met Asp Glu
            100                 105                 110
Phe Ile Ser Ser Asn Pro Cys Asn Phe Asp His Ala Ser Leu Phe Glu
        115                 120                 125
Met  *
129
```

<210> 804
<211> 458
<212>Amino acid
<213> Homo sapiens

<400> 804

```
Lys Gln Leu Ile Val Leu Gly Asn Lys Val Asp Leu Leu Pro Gln Asp
  1               5                  10                  15
Ala Pro Gly Tyr Arg Gln Arg Leu Arg Glu Arg Leu Trp Glu Asp Cys
            20                  25                  30
Ala Arg Ala Gly Leu Leu Leu Ala Pro Gly His Gln Gly Pro Gln Arg
        35                  40                  45
Pro Val Lys Asp Glu Pro Gln Asp Gly Glu Asn Pro Asn Pro Pro Asn
    50                  55                  60
Trp Ser Arg Thr Val Val Arg Asp Val Arg Leu Ile Ser Ala Lys Thr
65                  70                  75                  80
Gly Tyr Gly Val Glu Glu Leu Ile Ser Ala Leu Gln Arg Ser Trp Arg
                85                  90                  95
Tyr Arg Gly Asp Val Tyr Leu Val Gly Ala Thr Asn Ala Gly Lys Ser
            100                 105                 110
Thr Leu Phe Asn Thr Leu Leu Glu Ser Asp Tyr Cys Thr Ala Lys Gly
        115                 120                 125
Ser Glu Ala Ile Asp Arg Ala Thr Ile Ser Pro Trp Pro Gly Thr Thr
    130                 135                 140
Leu Asn Leu Leu Lys Phe Pro Ile Cys Asn Pro Thr Pro Tyr Arg Met
145                 150                 155                 160
Phe Lys Arg His Gln Arg Leu Lys Lys Asp Ser Thr Gln Ala Glu Glu
                165                 170                 175
```

```
Asp Leu Ser Glu Gln Glu Gln Asn Gln Leu Asn Val Leu Lys Lys His
            180                 185                 190
Gly Tyr Val Val Gly Arg Val Gly Arg Thr Phe Leu Tyr Ser Glu Glu
        195                 200                 205
Gln Lys Asp Asn Ile Pro Phe Glu Phe Asp Ala Asp Ser Leu Ala Phe
    210                 215                 220
Asp Met Glu Asn Asp Pro Val Met Gly Thr His Lys Ser Thr Lys Gln
225                 230                 235                 240
Val Glu Leu Thr Ala Gln Asp Val Lys Asp Ala His Trp Phe Tyr Asp
                245                 250                 255
Thr Pro Gly Ile Thr Lys Glu Asn Cys Ile Leu Asn Leu Leu Thr Glu
            260                 265                 270
Lys Glu Val Asn Ile Val Leu Pro Thr Gln Ser Ile Val Pro Arg Thr
        275                 280                 285
Phe Val Leu Lys Pro Gly Met Val Leu Phe Leu Gly Ala Ile Gly Arg
    290                 295                 300
Ile Asp Phe Leu Gln Gly Asn Gln Ser Ala Trp Phe Thr Val Val Ala
305                 310                 315                 320
Ser Asn Ile Leu Pro Val His Ile Thr Ser Leu Asp Arg Ala Asp Ala
                325                 330                 335
Leu Tyr Gln Lys His Ala Gly His Thr Leu Leu Gln Ile Pro Met Gly
            340                 345                 350
Gly Lys Glu Arg Met Ala Gly Phe Pro Pro Leu Val Ala Glu Asp Ile
        355                 360                 365
Met Leu Lys Glu Gly Leu Gly Ala Ser Glu Ala Val Ala Asp Ile Lys
    370                 375                 380
Phe Ser Ser Ala Gly Trp Val Ser Val Thr Pro Asn Phe Lys Asp Arg
385                 390                 395                 400
Leu His Leu Arg Gly Tyr Thr Pro Glu Gly Thr Val Leu Thr Val Arg
                405                 410                 415
Pro Pro Leu Leu Pro Tyr Ile Val Asn Ile Lys Gly Gln Arg Ile Lys
            420                 425                 430
Lys Ser Val Ala Tyr Lys Thr Lys Lys Pro Pro Ser Leu Met Tyr Asn
        435                 440                 445
Val Arg Lys Lys Lys Gly Lys Ile Asn Val
    450                 455         458
```

<210> 805
<211> 290
<212>Amino acid
<213> *Homo sapiens*

<400> 805

```
Ser Thr Val Ala Ser Met Met His Arg Gln Glu Thr Val Glu Cys Leu
  1                 5                  10                  15
Arg Lys Phe Asn Ala Arg Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr
             20                  25                  30
Met Leu Val Ser Arg Asn Phe Ser Ala Ala Lys Ser Leu Leu Asn Lys
         35                  40                  45
Lys Ser Asp Gly Gly Val Lys Pro Gln Ser Asn Asn Lys Asn Ser Leu
     50                  55                  60
Val Ser Pro Ala Gln Glu Pro Ala Pro Leu Gln Thr Ala Met Glu Pro
 65                  70                  75                  80
Gln Thr Thr Val Val His Asn Ala Thr Asp Gly Ile Lys Gly Ser Thr
                 85                  90                  95
Glu Ser Cys Asn Thr Thr Thr Glu Asp Glu Asp Leu Lys Ala Ala Pro
            100                 105                 110
Leu Arg Thr Gly Asn Gly Ser Ser Val Pro Glu Gly Arg Ser Ser Arg
        115                 120                 125
```

```
Asp Arg Thr Ala Pro Ser Ala Gly Met Gln Pro Gln Pro Ser Leu Cys
    130                 135                 140
Ser Ser Ala Met Arg Lys Gln Glu Ile Ile Lys Ile Thr Glu Gln Leu
145                 150                 155                 160
Ile Glu Ala Ile Asn Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys
                165                 170                 175
Asp Pro Gly Leu Thr Ser Phe Glu Pro Glu Ala Leu Gly Asn Leu Val
            180                 185                 190
Glu Gly Met Asp Phe His Lys Phe Tyr Phe Glu Asn Leu Leu Ser Lys
        195                 200                 205
Asn Ser Lys Pro Ile His Thr Thr Ile Leu Asn Pro His Val His Val
    210                 215                 220
Ile Gly Glu Asp Ala Ala Cys Ile Ala Tyr Ile Arg Leu Thr Gln Tyr
225                 230                 235                 240
Ile Asp Gly Gln Gly Arg Pro Ser Asn Pro Ala Lys Ser Glu Glu Thr
                245                 250                 255
Arg Val Trp His Arg Arg Asp Gly Lys Trp Leu Asn Val His Tyr His
            260                 265                 270
Cys Ser Gly Ala Pro Cys Pro His Arg Cys Ser Glu Leu Ser His Arg
        275                 280                 285
Gly Phe
    290
```

<210> 806
<211> 570
<212>Amino acid
<213> Homo sapiens

<400> 806

```
Leu Pro Lys Asn Val Val Phe Val Leu Asp Ser Ser Ala Ser Met Val
  1               5                  10                  15
Gly Thr Lys Leu Arg Gln Thr Lys Asp Ala Leu Phe Thr Ile Leu His
            20                  25                  30
Asp Leu Arg Pro Gln Asp Arg Phe Ser Ile Ile Gly Phe Ser Asn Arg
        35                  40                  45
Ile Lys Val Trp Lys Asp His Leu Ile Ser Val Thr Pro Asp Ser Ile
    50                  55                  60
Arg Asp Gly Lys Val Tyr Ile His His Met Ser Pro Thr Gly Gly Thr
65                  70                  75                  80
Asp Ile Asn Gly Ala Leu Gln Arg Ala Ile Arg Leu Leu Asn Lys Tyr
                85                  90                  95
Val Ala His Ser Gly Ile Gly Asp Arg Arg Val Ser Leu Ile Val Phe
            100                 105                 110
Leu Thr Asp Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile
        115                 120                 125
Leu Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr
    130                 135                 140
Ile Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu Ser
145                 150                 155                 160
Leu Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala
                165                 170                 175
Gly Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu
            180                 185                 190
Ser Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln Ala Thr
        195                 200                 205
Lys Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala
    210                 215                 220
Gly Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu Val Thr
225                 230                 235                 240
```

```
Ala Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val
                245                 250                 255
Arg Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg Pro Gly
            260                 265                 270
Gly Asp Gly Glu Gly Asp Thr Asn His Ile Glu Arg Leu Trp Ser Tyr
        275                 280                 285
Leu Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu
    290                 295                 300
Pro Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser
305                 310                 315                 320
Tyr Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val
                325                 330                 335
Pro Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met
            340                 345                 350
Gly Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro
        355                 360                 365
Gly Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys
    370                 375                 380
Thr Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro Leu Ser
385                 390                 395                 400
Arg Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp Ile Leu
                405                 410                 415
Arg Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn Gly Glu
            420                 425                 430
Leu Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln Arg Thr
        435                 440                 445
Tyr Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg Ser Tyr
    450                 455                 460
Leu Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp Arg Leu
465                 470                 475                 480
Val Leu Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly Leu Glu
                485                 490                 495
Val Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln Gly Ser
            500                 505                 510
Ile Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala Pro Phe
        515                 520                 525
Gln Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser
    530                 535                 540
Ser Asn Cys Arg Val Phe Cys Glu Ser Gly Ile Leu Ile Gln Glu Leu
545                 550                 555                 560
Thr Gln Gln Ser Val Ala Val Ala Gly Arg
                565                 570
```

<210> 807
<211> 279
<212>Amino acid
<213> Homo sapiens

<400> 807

```
Phe Phe Leu Glu Gln Val Ser Gln Tyr Thr Phe Ala Met Cys Ser Tyr
  1               5                  10                  15
Arg Glu Lys Lys Ser Glu Pro Gln Glu Leu Met Gln Leu Glu Gly Tyr
            20                  25                  30
Thr Val Asp Tyr Thr Asp Pro His Pro Gly Leu Gln Gly Gly Cys Met
        35                  40                  45
Phe Phe Asn Ala Val Lys Glu Gly Asp Thr Val Ile Phe Ala Ser Asp
    50                  55                  60
Asp Glu Gln Asp Arg Ile Leu Trp Val Gln Ala Met Tyr Arg Ala Thr
65                  70                  75                  80
```

```
Gly Gln Ser Tyr Lys Pro Val Pro Ala Ile Gln Thr Gln Lys Leu Asn
                85                  90                  95
Pro Lys Gly Gly Thr Leu His Ala Asp Ala Gln Leu Tyr Ala Asp Arg
            100                 105                 110
Phe Gln Lys His Gly Met Asp Glu Phe Ile Ser Ala Asn Pro Cys Lys
        115                 120                 125
Leu Asp His Ala Phe Leu Phe Arg Ile Leu Gln Arg Gln Thr Leu Asp
    130                 135                 140
His Arg Leu Asn Asp Ser Tyr Ser Cys Leu Gly Trp Phe Ser Pro Gly
145                 150                 155                 160
Gln Val Phe Val Leu Asp Glu Tyr Cys Ala Arg Tyr Gly Val Arg Gly
                165                 170                 175
Cys His Arg His Leu Cys Tyr Leu Ala Glu Leu Met Glu His Ser Glu
            180                 185                 190
Asn Gly Ala Val Ile Asp Pro Thr Leu Leu His Tyr Ser Phe Ala Phe
        195                 200                 205
Cys Ala Ser His Val His Gly Asn Arg Pro Asp Gly Ile Gly Thr Val
    210                 215                 220
Ser Val Glu Glu Lys Glu Arg Phe Glu Glu Ile Lys Glu Arg Leu Ser
225                 230                 235                 240
Ser Leu Leu Glu Asn Gln Ile Ser His Phe Arg Tyr Cys Phe Pro Phe
                245                 250                 255
Gly Arg Pro Glu Gly Ala Leu Lys Ala Thr Leu Ser Leu Leu Glu Arg
            260                 265                 270
Val Leu Met Lys Asp Ile Ala
        275                 279
```

<210> 808
<211> 251
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(251)
<223> X = any amino acid or stop code

<400> 808

```
Asp Gly Leu Leu His Glu Val Leu Asn Gly Leu Leu Asp Arg Pro Asp
  1               5                  10                  15
Trp Glu Glu Ala Val Lys Met Pro Val Gly Ile Leu Pro Cys Gly Ser
            20                  25                  30
Gly Asn Ala Leu Ala Gly Ala Val Asn Gln His Gly Gly Phe Glu Pro
        35                  40                  45
Ala Leu Gly Leu Asp Leu Leu Leu Asn Cys Ser Leu Leu Leu Cys Arg
    50                  55                  60
Gly Gly Gly His Pro Leu Asp Leu Leu Ser Val Thr Leu Ala Ser Gly
65                  70                  75                  80
Ser Arg Cys Phe Ser Phe Leu Ser Val Ala Trp Gly Phe Val Ser Asp
                85                  90                  95
Val Asp Ile Gln Ser Glu Arg Phe Arg Ala Leu Gly Ser Ala Arg Phe
            100                 105                 110
Thr Leu Gly Thr Val Leu Gly Leu Ala Thr Leu His Thr Tyr Arg Gly
        115                 120                 125
Arg Leu Ser Tyr Leu Pro Ala Thr Val Glu Pro Ala Ser Pro Thr Pro
    130                 135                 140
Ala His Ser Leu Pro Arg Ala Lys Ser Glu Leu Thr Leu Thr Pro Asp
145                 150                 155                 160
Pro Ala Pro Pro Met Ala His Ser Pro Leu His Arg Ser Val Ser Asp
```

```
                165                 170                 175
Leu Pro Leu Pro Leu Pro Gln Pro Ala Leu Ala Ser Pro Gly Ser Pro
            180                 185                 190
Glu Pro Leu Pro Ile Leu Ser Leu Asn Gly Gly Gly Pro Glu Leu Ala
        195                 200                 205
Gly Asp Trp Gly Gly Ala Gly Asp Ala Pro Leu Ser Pro Asp Pro Gln
    210                 215                 220
Leu Ser Ser Pro Pro Gly Ser Pro Lys Ala Ala Leu His Ser Pro Val
225                 230                 235                 240
Xaa Lys Lys Ala Pro Val Ile Pro Pro Asp Met
                245                 250 251
```

<210> 809
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 809

```
Lys Gly Val Pro Thr Leu Leu Met Ala Ala Gly Ser Phe Tyr Asp Ile
  1               5                  10                  15
Leu Ala Ile Thr Gly Phe Asn Thr Cys Leu Gly Ile Ala Phe Ser Thr
            20                  25                  30
Gly Ser Thr Val Phe Asn Val Leu Arg Gly Val Leu Glu Val Val Ile
        35                  40                  45
Gly Val Ala Thr Gly Ser Val Leu Gly Phe Phe Ile Gln Tyr Phe Pro
    50                  55                  60
Ser Arg Asp Gln Asp Lys Leu Val Cys Lys Arg Thr Phe Leu Val Leu
65                  70                  75                  80
Gly Leu Ser Val Leu Ala Val Phe Ser Ser Val His Phe Gly Phe Pro
                85                  90                  95
Gly Ser Gly Gly Leu Cys Thr Leu Val Met Ala Phe Leu Ala Gly Met
            100                 105                 110
Gly Trp Thr Ser Glu Lys Ala Glu Val Glu Lys Ile Ile Ala Val Ala
        115                 120                 125
Trp Asp Ile Phe Gln Pro Leu Leu Phe Gly Leu Ile Gly Ala Glu Val
    130                 135                 140
Ser Ile Ser Ser Leu Arg Pro Glu Thr Val Gly Leu Cys Val Ala Thr
145                 150                 155                 160
Val Gly Ile Ala Val Leu Ile Arg Ile Phe Asp Tyr Ile Phe
                165                 170             174
```

<210> 810
<211> 104
<212>Amino acid
<213> Homo sapiens

<400> 810

```
Leu Leu Lys Glu Val Val Val Gln Ala Ser Pro Val Cys Lys Thr Cys
  1               5                  10                  15
Cys Ser Gln Leu Val Arg Thr Pro Val Thr Phe Thr Glu Val Gln Asn
            20                  25                  30
Val Cys Arg Cys Ser Ala Gly Tyr Leu Ile Ser Val Cys Ser Tyr Thr
        35                  40                  45
Ser Ser Asp His Asn Gln Cys Tyr Ala Gly Thr Ala Ser Leu Ala Leu
```

```
     50                  55                  60
Leu Trp Ile Gly Gly Ile Leu Lys Gly Cys Leu Leu Trp Lys Gln Phe
 65                  70                  75                  80
Arg Trp Thr Glu Arg Ser His Trp Asn Phe Gly Tyr Trp Ala Leu Trp
                 85                  90                  95
Ser Pro Gly Asn Gly Asn Gly Cys
            100                 104
```

<210> 811
<211> 77
<212>Amino acid
<213> Homo sapiens

<400> 811

```
Ile Cys Thr Ser Thr Tyr Leu Gln Ile Phe Pro Gly Lys Pro Ser Cys
  1               5                  10                  15
Phe Met Cys Lys Gly Arg Leu Met Cys Ile Tyr Phe Ile Leu Trp Tyr
            20                  25                  30
Leu Gly His Tyr Thr Ser Leu His Trp Asn Trp Cys Arg Tyr Ile Ser
        35                  40                  45
Asp Pro Asn Val Asp Ala Cys Pro Asp Pro Arg Asn Ala Glu Val Ser
     50                  55                  60
Met Thr His Thr Val Pro Ala Leu Met Glu Leu Ile Asp
 65                  70                  75      77
```

<210> 812
<211> 194
<212>Amino acid
<213> Homo sapiens

<400> 812

```
Leu Glu Ser Leu Pro Gly Phe Lys Glu Ile Val Ser Arg Gly Val Lys
  1               5                  10                  15
Val Asp Tyr Leu Thr Pro Asp Phe Pro Ser Leu Ser Tyr Pro Asn Tyr
            20                  25                  30
Tyr Thr Leu Met Thr Gly Arg His Cys Glu Val His Gln Met Ile Gly
        35                  40                  45
Asn Tyr Met Trp Asp Pro Thr Thr Asn Lys Ser Phe Asp Ile Gly Val
     50                  55                  60
Asn Lys Asp Ser Leu Met Pro Leu Trp Trp Asn Gly Ser Glu Pro Leu
 65                  70                  75                  80
Trp Val Thr Leu Thr Lys Ala Lys Arg Lys Val Tyr Met Tyr Tyr Trp
                 85                  90                  95
Pro Gly Cys Glu Val Glu Ile Leu Gly Val Arg Pro Thr Tyr Cys Leu
            100                 105                 110
Glu Tyr Lys Asn Val Pro Thr Asp Ile Asn Phe Ala Asn Ala Val Ser
        115                 120                 125
Asp Ala Leu Asp Ser Phe Lys Ser Gly Arg Ala Asp Leu Ala Ala Ile
    130                 135                 140
Tyr His Glu Arg Ile Asp Val Glu Gly His His Tyr Gly Pro Ala Ser
145                 150                 155                 160
Pro Gln Arg Lys Asp Ala Leu Lys Ala Val Asp Thr Val Leu Lys Tyr
                165                 170                 175
Met Thr Lys Trp Ile Gln Glu Arg Gly Leu Gln Asp Arg Leu Asn Val
```

180 185 190
Ile Ile
194

<210> 813
<211> 116
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(116)
<223> X = any amino acid or stop code

<400> 813
Ala Arg Asp Phe His Pro Lys Gln Thr Leu Asp Phe Leu Arg Ser Asp
1 5 10 15
Met Ala Asn Ser Lys Ile Thr Glu Glu Val Lys Arg Ser Ile Ala Gln
20 25 30
Gln Tyr Leu Asp Leu Thr Val Ala Leu Glu Gln Val Asp Pro Asp Ala
35 40 45
Glu Val Asp Ala Ala Pro Ser Thr Thr Ser Ser Cys Gly His Xaa Asp
50 55 60
Ser His Ala Gly Ser Xaa Arg Val Leu Ser Leu Leu Gly Asp Xaa Gly
65 70 75 80
Pro Ala Xaa Thr Gly Ala Asn Ser Met Ala Gly Lys Leu Leu Leu Val
85 90 95
Ala Trp Leu Gly Phe Pro Asp Pro Phe Trp Gly Lys Glu Leu Ser Asp
100 105 110
Pro Ala Phe Lys
115 116

<210> 814
<211> 121
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(121)
<223> X = any amino acid or stop code

<400> 814
Lys Gln Ser Gly Asp Val Thr Cys Asn Cys Thr Asp Gly Arg Leu Ala
1 5 10 15
Pro Ser Cys Leu Thr Cys Val Gly His Cys Ile Phe Gly Gly Tyr Cys
20 25 30
Thr Met Asn Ser Lys Met Met Pro Glu Cys Gln Ser Pro Pro His Met
35 40 45
Thr Gly Pro Arg Cys Glu Glu His Val Phe Ser Gln His Gln Pro Gly
50 55 60
His Ile Thr Ser Ile Leu Ile Pro Met Leu Xaa Leu Leu Leu Leu Val
65 70 75 80
Leu Val Ala Gly Val Ile Phe Cys His Lys Arg Arg Val Gln Gly Ala

```
                85                  90                  95
Lys Gly Phe Gln His Gln Arg Met Thr Asn Gly Ala Met Asn Ala Gln
            100                 105                 110
Ile Ala Asn Pro Thr Tyr Lys Met Tyr
        115                 120 121
```

<210> 815
<211> 86
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(86)
<223> X = any amino acid or stop code

<400> 815

```
Thr Val Glu Asn Ala Gly Arg Trp Leu Xaa Glu Glu Ala Glu Ile Gln
 1               5                  10                  15
Ala Glu Leu Glu Arg Leu Glu Arg Val Arg Asn Leu His Ile Arg Glu
            20                  25                  30
Leu Lys Arg Ile Asn Asn Glu Asp Asn Ser Gln Phe Lys Asp His Pro
        35                  40                  45
Thr Leu Asn Glu Arg Tyr Leu Leu Leu His Leu Leu Gly Arg Gly Gly
    50                  55                  60
Phe Ser Glu Val Tyr Lys Val Met Tyr Gly Leu Phe Trp Phe Phe Tyr
65                  70                  75                  80
Thr Asn Val Ala Arg Ile
                85  86
```

<210> 816
<211> 130
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(130)
<223> X = any amino acid or stop code

<400> 816

```
Met Cys Glu Glu Phe Leu Val Met Gly Lys Gly Cys Ser Cys Val Phe
 1               5                  10                  15
Xaa Ile Leu Leu Ser Asn Pro Gln Met Trp Trp Leu Asn Asp Ser Asn
            20                  25                  30
Pro Glu Thr Asp Asn Arg Gln Glu Ser Pro Ser Gln Glu Asn Ile Asp
        35                  40                  45
Arg Val Ser Asp Met Ala Phe Val Pro Ser Ala Trp Thr Ala Ser Gly
    50                  55                  60
Gly Val Ala Trp Gly Asn Leu Gly Glu Ser Gly Ser Arg Thr Gly Gly
65                  70                  75                  80
Val Arg Ala Glu Thr Leu Ala Pro Arg Leu Gln Val Xaa Pro Ala His
                85                  90                  95
Leu Arg Gly His Pro Arg Ser Asn Arg Gly Gln Gly Arg Pro Pro Trp
```

```
            100                 105                 110
Lys Ala Gly Lys Leu Gly Lys Cys Gln Glu Val Leu Phe Arg Phe Ala
        115                 120                 125
Ala Phe
    130
```

<210> 817
<211> 119
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(119)
<223> X = any amino acid or stop code

<400> 817

```
Phe Arg Ala Met Phe Leu Ala Val Gln His Asp Cys Arg Pro Met Asp
  1               5                  10                  15
Lys Ser Ala Gly Ser Gly His Lys Ser Glu Glu Lys Arg Glu Lys Met
            20                  25                  30
Lys Arg Thr Leu Leu Lys Asp Trp Lys Thr Arg Leu Ser Tyr Phe Leu
        35                  40                  45
Gln Asn Ser Ser Thr Pro Gly Lys Pro Lys Thr Gly Lys Lys Ser Lys
    50                  55                  60
Gln Gln Ala Phe Ile Lys Xaa Val Glu Asn Pro Glu Leu Ala Asn Ile
65                  70                  75                  80
Asn Ser Xaa Leu Leu Asn Xaa Lys Gly Glu Leu Xaa Xaa Ala Xaa Ala
                85                  90                  95
Asn Ile Gln Asn Leu Ser Cys Arg Pro Ser Pro Glu Glu Ala Gln Leu
            100                 105                 110
Trp Ser Glu Ala Phe Asp Glu
        115                 119
```

<210> 818
<211> 131
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(131)
<223> X = any amino acid or stop code

<400> 818

```
Gly Phe Phe Asn Phe Ser Ser Pro Lys Leu Lys Gly Trp Lys Ile Asn
  1               5                  10                  15
Ser Ser Leu Val Leu Glu Ile Arg Lys Asn Ile Leu Arg Phe Leu Asp
            20                  25                  30
Ala Glu Arg Asp Val Ser Val Val Lys Ser Ser Phe Pro Ser Lys Asp
        35                  40                  45
Ala Arg His Ser Ser Val His Arg Xaa Phe Thr Gln Leu His Trp Gly
    50                  55                  60
Pro Pro Ser His Thr Pro Ala Arg Pro Xaa Arg Gly Phe Phe Asn Phe
```

```
 65                  70                  75                  80
Ser Ser Pro Lys Leu Lys Gly Trp Lys Ile Asn Ser Ser Leu Val Leu
                 85                  90                  95
Glu Ile Arg Lys Asn Ile Leu Arg Phe Leu Asp Ala Glu Arg Asp Val
            100                 105                 110
Ser Val Val Lys Ser Ser Phe Pro Ser Lys Asp Ala Arg His Ser Ser
        115                 120                 125
Val His Arg
    130 131
```

<210> 819
<211> 85
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(85)
<223> X = any amino acid or stop code

<400> 819

```
Arg Ile Asp Asp Gln Gln Glu Leu Lys Arg Val Thr Xaa Tyr Ser Gln
  1               5                  10                  15
Lys Glu Tyr Thr Lys Lys Lys Leu His Lys Lys Cys Asn Ile Ile Gln
            20                  25                  30
Ala Asp Ile Lys Pro Asp Asn Ile Leu Asp Asn Glu Ser Ile Thr Ile
        35                  40                  45
Leu Lys Leu Ser Asp Phe Gly Ser Ala Ser His Val Ala Asp Asn Asp
    50                  55                  60
Ile Thr Pro Ser Ser Ser Gln Thr Thr Ser Ala Ala Ser Ser Pro Pro
 65                  70                  75                  80
Arg Thr Leu Arg Arg
                85
```

<210> 820
<211> 44
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(44)
<223> X = any amino acid or stop code

<400> 820

```
Ser Ser Lys Pro Trp Asp Xaa Ser Leu Ala Pro Lys His Ser Gly Xaa
  1               5                  10                  15
Thr Lys Asn Met Asp Cys Tyr Cys Ile Ile Pro Thr Cys Ile Gly Arg
            20                  25                  30
Glu Arg Cys Tyr Gly Thr Cys Ile Gly Asp Thr Val
        35                  40              44
```

<210> 821

<211> 105
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(105)
<223> X = any amino acid or stop code

<400> 821

```
Asn Ser Ser Lys Lys Leu Val Met Glu His Gln Trp Lys Lys Tyr Leu
 1               5                  10                  15
Arg Arg Asn Tyr Gln Arg Met Leu Asn Arg Leu Ile Thr Leu Ile Gly
            20                  25                  30
Ser Cys Gly Val Leu Xaa Leu Ile Ser Thr Ile Pro Thr Ser Arg Leu
        35                  40                  45
Lys Phe Leu Lys Glu Thr Gly His Gly Thr Pro Met Glu Glu Ile Pro
    50                  55                  60
Glu Glu Glu Leu Ser Glu Asp Val Glu Gln Ile Asp His Ala Asp Arg
65                  70                  75                  80
Glu Leu Arg Arg Gly Gln Asn Leu Arg Cys Lys Gly Ile His Arg Leu
                85                  90                  95
Pro Thr His Ile Gln Val Gly Gln Asn
            100                 105
```

<210> 822
<211> 172
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(172)
<223> X = any amino acid or stop code

<400> 822

```
Lys Trp Met Leu Leu His Ser Phe Lys Ile Phe Cys Leu Ser Leu Tyr
 1               5                  10                  15
Pro Gln Leu Xaa Cys Pro Phe Glu Phe Phe Ser His Ser Ala Thr Ile
            20                  25                  30
Phe His Glu Leu Val Tyr Lys Gln Thr Lys Ile Ile Ser Ser Asn Gln
        35                  40                  45
Glu Leu Ile Tyr Glu Gly Arg Arg Leu Val Leu Glu Pro Gly Arg Leu
    50                  55                  60
Ala Gln His Phe Pro Lys Thr Thr Glu Glu Asn Pro Ile Phe Val Val
65                  70                  75                  80
Ser Arg Glu Pro Leu Asn Thr Ile Gly Leu Ile Tyr Glu Lys Ile Ser
                85                  90                  95
Leu Pro Lys Val His Pro Arg Tyr Asp Leu Asp Gly Asp Ala Ser Met
            100                 105                 110
Ala Lys Ala Ile Thr Gly Val Val Cys Tyr Ala Cys Arg Ile Ala Ser
        115                 120                 125
Thr Leu Leu Leu Tyr Gln Glu Leu Met Arg Lys Gly Ile Arg Trp Leu
    130                 135                 140
Ile Glu Leu Ile Lys Asp Asp Tyr Asn Glu Thr Val His Lys Lys Thr
```

```
145                 150                 155                 160
Glu Val Val Ile Thr Leu Gly Phe Leu Val Ser Arg
                165                 170     172
```

<210> 823
<211> 104
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(104)
<223> X = any amino acid or stop code

<400> 823

```
Gly Thr Arg Lys Met Gly Pro Thr Val Ser Pro Ile Cys Leu Pro Gly
  1               5                  10                  15
Thr Trp Gly Asp Tyr Asn Leu Met Asp Gly Asp Leu Gly Leu Ile Ser
             20                  25                  30
Gly Trp Gly Arg Thr Glu Lys Arg Asp Arg Ala Asp Arg Leu Lys Ala
         35                  40                  45
Gly Arg Ser Pro Ala Ala Gly Xaa Arg Lys Trp Glu Pro Gly Arg Gly
     50                  55                  60
Asp Pro Thr Trp Glu Glu Ser Glu Glu Asp Val His Lys Ser Lys Trp
 65                  70                  75                  80
Thr Arg Cys Val Asp Glu Lys Gly Ala Xaa Cys Xaa Thr Asp Asn Lys
                 85                  90                  95
Arg Pro Leu Arg Cys Gly Val Thr
            100                 104
```

<210> 824
<211> 99
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(99)
<223> X = any amino acid or stop code

<400> 824

```
His Glu Leu Glu Asn Leu Ile Lys Ser Ala His Ser Tyr Ser Leu Tyr
  1               5                  10                  15
Xaa Gly Xaa Tyr Leu His Gly Ala Xaa Thr Ala Glu Pro Glu Ala Ser
             20                  25                  30
Phe Cys Pro Arg Arg Gly Trp Asn Arg Gln Ala Gly Ala Ala Gly Ser
         35                  40                  45
Arg Met Asn Phe Arg Pro Gly Val Leu Ser Ser Arg Gln Leu Gly Leu
     50                  55                  60
Pro Gly Pro Pro Asp Gly Pro Asp Tyr Thr Val Tyr Tyr Pro Phe His
 65                  70                  75                  80
Arg Leu Ala Met Val Thr Ala Ala Ser Arg Leu Glu Arg Glu His Leu
                 85                  90                  95
Thr His Leu
```

<210> 825
<211> 111
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(111)
<223> X = any amino acid or stop code

<400> 825
Pro Val Pro Leu Pro His Pro Ile Leu Glu Val Cys Pro Gly Gln Xaa
1 5 10 15
Glu Pro Gln Ser Ala Ile Ser Leu Thr Ala Phe Gln Val Gln Ala Gly
20 25 30
Ala Ser Arg Ala Ser Pro Gly Pro Pro Ala Pro Ser Ser Ser Lys Pro
35 40 45
Gly Arg Lys Ala Lys Val Ala Ser Pro Cys Pro Asp Arg Pro Ala Pro
50 55 60
Pro Pro Thr Xaa Pro Arg Pro Ala Ala Ala Pro Gly Ser Glu Ser Ser
65 70 75 80
Pro Arg Pro Pro Arg Pro Arg Thr Gly Arg Arg Gln Gln Arg Ala His
85 90 95
Ala Arg Arg Ala Ala Ala Arg Thr Ala Pro Trp Arg Pro Ser Cys
100 105 110 111

<210> 826
<211> 95
<212>Amino acid
<213> Homo sapiens

<400> 826
His Glu Gly Arg Arg Arg Gly Trp Ala Ser Ala Ser Gln Arg Phe Leu
1 5 10 15
Arg Asn Trp Ala Phe Leu Thr Pro Ser Lys Val Arg Arg Leu Lys Gly
20 25 30
Gln Lys Ala Phe Gly Lys Leu Pro Ser His Ser Asp Thr Ser Leu Thr
35 40 45
Ser Asp Leu Gly Phe His His Arg Phe Asn Pro Asn Ala Ser Ser Ser
50 55 60
Phe Lys Pro Ser Gly Thr Lys Phe Ala Ile Gln Tyr Gly Thr Gly Arg
65 70 75 80
Val Asp Gly Ile Leu Ser Glu Asp Lys Leu Thr Val Ser Gly Leu
85 90 95

<210> 827
<211> 33
<212>Amino acid
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(33)
<223> X = any amino acid or stop code

<400> 827

```
Gly Arg Asn Ile Met His Tyr Pro Asn Gly His Ala Ile Cys Ile Ala
  1               5                  10                  15
Asn Gly His Cys Ile Ile Leu Xaa Asn Ser His Asn Ile Lys Val Trp
            20                  25                  30
Val
 33
```

<210> 828
<211> 178
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(178)
<223> X = any amino acid or stop code

<400> 828

```
Ile Asn Leu Gly Asn Thr Cys Tyr Met Asn Ser Val Ile Xaa Ala Leu
  1               5                  10                  15
Phe Met Ala Thr Asp Phe Arg Arg Gln Val Leu Ser Leu Asn Leu Asn
            20                  25                  30
Gly Cys Asn Ser Leu Met Lys Lys Leu Gln His Leu Phe Ala Phe Leu
        35                  40                  45
Ala His Thr Gln Arg Glu Ala Tyr Ala Pro Arg Ile Phe Phe Glu Ala
    50                  55                  60
Ser Arg Pro Pro Trp Phe Thr Pro Arg Ser Gln Gln Asp Cys Ser Glu
65                  70                  75                  80
Tyr Leu Arg Phe Leu Leu Asp Arg Leu His Glu Glu Glu Lys Ile Leu
                85                  90                  95
Lys Val Gln Ala Ser His Lys Pro Ser Glu Ile Leu Glu Cys Ser Glu
            100                 105                 110
Thr Ser Leu Gln Glu Val Ala Ser Lys Ala Ala Val Leu Thr Glu Thr
        115                 120                 125
Pro Arg Thr Ser Asp Gly Glu Lys Thr Leu Ile Glu Lys Met Phe Gly
    130                 135                 140
Gly Lys Leu Arg Thr His Ile Arg Cys Leu Asn Cys Thr Ser Thr Ser
145                 150                 155                 160
Gln Lys Val Glu Ala Phe Thr Asp Leu Ser Leu Ala Phe Trp Pro Ser
                165                 170                 175
Ser Ser
    178
```

<210> 829
<211> 43
<212>Amino acid
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(43)
<223> X = any amino acid or stop code

<400> 829

```
Ala Arg Asp Asp Pro Arg Val Arg Leu Ser Leu Ser Pro Asn Phe Phe
  1               5                  10                  15
Xaa Leu Ala Ser Lys Leu Gly Lys Gln Trp Thr Pro Leu Ile Ile Leu
            20                  25                  30
Ala Asn Ser Leu Ser Gly Thr Asn Met Gly Glu
        35                  40          43
```

<210> 830
<211> 259
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(259)
<223> X = any amino acid or stop code

<400> 830

```
Met His Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu
  1               5                  10                  15
Asp Met Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr
            20                  25                  30
Glu Ser Cys Thr Asp Ser Gly Ala Glu Asn Glu Gly Ser Cys His Ser
        35                  40                  45
Asp Gln Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly
    50                  55                  60
Ile Cys Leu Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly
65                  70                  75                  80
Leu Glu Lys Asn Ser Leu Ile Tyr Glu Leu Phe Ser Val Met Val His
                85                  90                  95
Ser Gly Ser Ala Ala Gly Gly His Tyr Tyr Ala Cys Ile Lys Ser Phe
            100                 105                 110
Ser Asp Glu Gln Trp Tyr Ser Phe Asn Asp Gln His Val Ser Arg Ile
        115                 120                 125
Thr Gln Glu Asp Ile Lys Lys Thr His Gly Gly Ser Ser Gly Ser Arg
    130                 135                 140
Gly Tyr Tyr Ser Ser Ala Phe Ala Ser Ser Thr Asn Ala Tyr Met Leu
145                 150                 155                 160
Ile Tyr Arg Leu Lys Asp Pro Ala Arg Asn Ala Lys Phe Leu Glu Val
                165                 170                 175
Asp Glu Tyr Pro Glu His Ile Lys Asn Leu Val Gln Lys Glu Arg Glu
            180                 185                 190
Leu Glu Glu Gln Glu Lys Arg Gln Arg Glu Ile Glu Arg Asn Thr Cys
        195                 200                 205
Lys Ile Lys Leu Phe Cys Leu His Pro Thr Lys Gln Val Met Met Glu
    210                 215                 220
Asp Xaa Ile Glu Val His Lys Asp Lys Thr Leu Lys Glu Ala Val Glu
225                 230                 235                 240
Met Ala Tyr Lys Met Met Asp Leu Glu Glu Val Ile Pro Leu Asp Cys
                245                 250                 255
```

Cys Arg Leu
259

<210> 831
<211> 200
<212>Amino acid
<213> Homo sapiens

<400> 831
Ser Val Met Pro Val Pro Ala Leu Cys Leu Leu Trp Ala Leu Ala Met
1 5 10 15
Val Thr Arg Pro Ala Ser Ala Ala Pro Met Gly Gly Pro Glu Leu Ala
20 25 30
Gln His Glu Glu Leu Thr Leu Leu Phe His Gly Thr Leu Gln Leu Gly
35 40 45
Gln Ala Leu Asn Gly Val Tyr Arg Thr Thr Glu Gly Arg Leu Thr Lys
50 55 60
Ala Arg Asn Ser Leu Gly Leu Tyr Gly Arg Thr Ile Glu Leu Leu Gly
65 70 75 80
Gln Glu Val Ser Arg Gly Arg Asp Ala Ala Gln Glu Leu Arg Ala Ser
85 90 95
Leu Leu Glu Thr Gln Met Glu Glu Asp Ile Leu Gln Leu Gln Ala Glu
100 105 110
Ala Thr Ala Glu Val Leu Gly Glu Val Ala Gln Ala Gln Lys Val Leu
115 120 125
Arg Asp Ser Val Gln Arg Leu Glu Val Gln Leu Arg Ser Ala Trp Leu
130 135 140
Gly Pro Ala Tyr Arg Glu Phe Glu Val Leu Lys Ala His Ala Asp Lys
145 150 155 160
Gln Ser His Ile Leu Trp Ala Leu Thr Gly His Val Gln Arg Gln Arg
165 170 175
Arg Glu Met Val Ala Gln Gln His Arg Leu Arg Gln Ile Gln Glu Arg
180 185 190
Leu His Thr Ala Ala Leu Pro Ala
195 200

<210> 832
<211> 225
<212>Amino acid
<213> Homo sapiens

<400> 832
Ile Thr Ser Val Asp Pro Arg Val Arg Gly Asn Ala Ser Thr Gly Tyr
1 5 10 15
Gly Lys Ile Trp Leu Asp Asp Val Ser Cys Asp Gly Asp Glu Ser Asp
20 25 30
Leu Trp Ser Cys Arg Asn Ser Gly Trp Gly Asn Asn Asp Cys Ser His
35 40 45
Ser Glu Asp Val Gly Val Ile Cys Ser Asp Ala Ser Asp Met Glu Leu
50 55 60
Arg Leu Val Gly Gly Ser Ser Arg Cys Ala Gly Lys Val Glu Val Asn
65 70 75 80
Val Gln Gly Ala Val Gly Ile Leu Cys Ala Asn Gly Trp Gly Met Asn
85 90 95

```
Ile Ala Glu Val Val Cys Arg Gln Leu Glu Cys Gly Ser Ala Ile Arg
            100                 105                 110
Val Ser Arg Glu Pro His Phe Thr Glu Arg Thr Leu His Ile Leu Met
        115                 120                 125
Ser Asn Ser Gly Cys Ala Gly Gly Glu Ala Ser Leu Trp Asp Cys Ile
    130                 135                 140
Arg Trp Glu Trp Lys Gln Thr Ala Cys His Leu Asn Met Glu Ala Ser
145                 150                 155                 160
Leu Ile Cys Ser Ala His Arg Gln Pro Arg Leu Val Gly Ala Asp Met
                165                 170                 175
Pro Cys Ser Gly Arg Val Glu Val Lys His Ala His Thr Trp Arg Ser
            180                 185                 190
Val Cys Asp Ser Asp Phe Ser Leu His Ala Ala Asn Val Leu Cys Arg
        195                 200                 205
Glu Leu Asn Cys Gly Asp Ala Ile Ser Leu Ser Val Gly Asp His Phe
    210                 215                 220
Gly
225
```

<210> 833
<211> 206
<212>Amino acid
<213> Homo sapiens

<400> 833

```
Ser Asn Tyr Pro Ser Ser Arg Phe Arg Val Ala Gly Ile Thr Gly Val
  1                 5                  10                  15
Lys Leu Gly Met Arg Ser Ile Pro Ile Ala Thr Ala Cys Thr Ile Tyr
             20                  25                  30
His Lys Phe Phe Cys Glu Thr Asn Leu Asp Ala Tyr Asp Pro Tyr Leu
         35                  40                  45
Ile Ala Met Ser Ser Ile Tyr Leu Ala Gly Lys Val Glu Glu Gln His
     50                  55                  60
Leu Arg Thr Arg Asp Ile Ile Asn Val Ser Asn Arg Tyr Phe Asn Pro
 65                  70                  75                  80
Ser Gly Glu Pro Leu Glu Leu Asp Ser Arg Phe Trp Glu Leu Arg Asp
                 85                  90                  95
Ser Ile Val Gln Cys Glu Leu Leu Met Leu Arg Val Leu Arg Phe Gln
            100                 105                 110
Val Ser Phe Gln His Pro His Lys Tyr Leu Leu His Tyr Leu Val Ser
        115                 120                 125
Leu Gln Asn Trp Leu Asn Arg His Ser Trp Gln Arg Thr Pro Val Ala
    130                 135                 140
Val Thr Ala Trp Ala Leu Leu Arg Asp Ser Tyr His Gly Ala Leu Cys
145                 150                 155                 160
Leu Arg Phe Gln Ala Gln His Ile Ala Val Ala Val Leu Tyr Leu Ala
                165                 170                 175
Leu Gln Val Tyr Gly Val Glu Val Pro Ala Glu Val Glu Ala Asp Glu
            180                 185                 190
Ala Val Gly Trp Gln Ile Tyr Ala Met Asp Thr Glu Ile Pro
        195                 200                 205 206
```

<210> 834
<211> 86
<212>Amino acid
<213> Homo sapiens

<400> 834
Arg Gly Ser Arg His Ala Val His Gly Trp Ala Phe Gly Leu Leu Phe
1 5 10 15
Ile Asn Lys Glu Ser Val Val Met Ala Tyr Leu Phe Thr Thr Phe Asn
20 25 30
Ala Phe Gln Gly Val Phe Ile Phe Val Phe His Cys Ala Leu Gln Lys
35 40 45
Lys Val Arg Ser Arg Arg Gly Pro Gly Ser Gln Pro Pro Leu Glu Thr
50 55 60
Phe Pro Gly Tyr Pro Gly Glu Gly Gly Glu Gly Gly Gly Asp Ser Gly
65 70 75 80
Ala Pro Ser Ser Pro Gln
85 86

<210> 835
<211> 110
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(110)
<223> X = any amino acid or stop code

<400> 835
Ala Arg Lys Asp Asp Leu Pro Pro Asn Met Arg Phe His Glu Glu Lys
1 5 10 15
Arg Leu Asp Phe Glu Trp Thr Leu Lys Ala Gly Xaa Glu Lys Gly Xaa
20 25 30
Pro Ser Lys Xaa Asn Lys Gly Trp Glu Gly Gln Glu Xaa Xaa Xaa Thr
35 40 45
Val Arg Asp Xaa Gly Ile Ser Xaa Xaa Val Lys Pro Gln His Leu Ser
50 55 60
Xaa Ala Leu Gln Met Ala Leu Lys Arg Val Tyr Thr Leu Leu Ser Ser
65 70 75 80
Trp Asn Cys Leu Glu Asp Phe Asp Gln Ile Phe Trp Gly Gln Lys Ser
85 90 95
Ala Leu Ala Gly Gln Trp Phe Pro Glu Val Ser Ile Ile Pro
100 105 110

<210> 836
<211> 70
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(70)
<223> X = any amino acid or stop code

<400> 836

```
Gly Lys Gln Gln Arg Glu Thr Leu Arg Arg Pro Ser Pro Thr Ile Ser
 1               5                  10                  15
Val Gln Arg Ala Gly Ser Pro Glu His Ser Ser Ala Ser His Xaa His
            20                  25                  30
Ser Pro Cys Pro Ala Pro Gly Gln Arg Val Leu Pro Thr Ala Leu Cys
        35                  40                  45
Thr Leu Met Thr Ser Lys His Phe His Gly Cys Pro Leu Ala Gly Gln
    50                  55                  60
Gly Arg Ala Val Thr Leu
65                  70
```

<210> 837
<211> 473
<212>Amino acid
<213> Homo sapiens

<400> 837

```
Gly Val Cys Gly Leu Pro Arg Phe Cys Gly Ser Ile Ile Leu Cys His
 1               5                  10                  15
Tyr Glu Met Ser Ser Leu Gly Ala Ser Phe Val Gln Ile Lys Phe Asp
            20                  25                  30
Asp Leu Gln Phe Phe Glu Asn Cys Gly Gly Gly Ser Phe Gly Ser Val
        35                  40                  45
Tyr Arg Ala Lys Trp Ile Ser Gln Asp Lys Glu Val Ala Val Lys Lys
    50                  55                  60
Leu Leu Lys Ile Glu Lys Glu Ala Glu Ile Leu Ser Val Leu Ser His
65                  70                  75                  80
Arg Asn Ile Ile Gln Phe Tyr Gly Val Ile Leu Glu Pro Pro Asn Tyr
                85                  90                  95
Gly Ile Val Thr Glu Tyr Ala Ser Leu Gly Ser Leu Tyr Asp Tyr Ile
            100                 105                 110
Asn Ser Asn Arg Ser Glu Glu Met Asp Met Asp His Ile Met Thr Trp
        115                 120                 125
Ala Thr Asp Val Ala Lys Gly Met His Tyr Leu His Met Glu Ala Pro
    130                 135                 140
Val Lys Val Ile His Arg Asp Leu Lys Ser Arg Asn Val Val Ile Ala
145                 150                 155                 160
Ala Asp Gly Val Leu Lys Ile Cys Asp Phe Gly Ala Ser Arg Phe His
                165                 170                 175
Asn His Thr Thr His Met Ser Leu Val Gly Thr Phe Pro Trp Met Ala
            180                 185                 190
Pro Glu Val Ile Gln Ser Leu Pro Val Ser Glu Thr Cys Asp Thr Tyr
        195                 200                 205
Ser Tyr Gly Val Val Leu Trp Glu Met Leu Thr Arg Glu Val Pro Phe
    210                 215                 220
Lys Gly Leu Glu Gly Leu Gln Val Ala Trp Leu Val Val Glu Lys Asn
225                 230                 235                 240
Glu Arg Leu Thr Ile Pro Ser Ser Cys Pro Arg Ser Phe Ala Glu Leu
                245                 250                 255
Leu His Gln Cys Trp Glu Ala Asp Ala Lys Lys Arg Pro Ser Phe Lys
            260                 265                 270
Gln Ile Ile Ser Ile Leu Glu Ser Met Ser Asn Asp Thr Ser Leu Pro
        275                 280                 285
Asp Lys Cys Asn Ser Phe Leu His Asn Lys Ala Glu Trp Arg Cys Glu
    290                 295                 300
Ile Glu Ala Thr Leu Glu Arg Leu Lys Lys Leu Glu Arg Asp Leu Ser
305                 310                 315                 320
Phe Lys Glu Gln Glu Leu Lys Glu Arg Glu Arg Arg Leu Lys Met Trp
                325                 330                 335
```

```
Glu Gln Lys Leu Thr Glu Gln Ser Asn Thr Pro Leu Leu Leu Pro Leu
            340                 345                 350
Ala Ala Arg Met Ser Glu Glu Ser Tyr Phe Glu Ser Lys Thr Glu Glu
        355                 360                 365
Ser Asn Ser Ala Glu Met Ser Cys Gln Ile Thr Ala Thr Ser Asn Gly
    370                 375                 380
Glu Gly His Gly Met Asn Pro Ser Leu Gln Ala Met Met Leu Met Gly
385                 390                 395                 400
Phe Gly Asp Ile Phe Ser Met Asn Lys Ala Gly Ala Val Met His Ser
                405                 410                 415
Gly Met Gln Ile Asn Met Gln Ala Lys Gln Asn Ser Ser Lys Thr Thr
            420                 425                 430
Ser Lys Arg Arg Gly Lys Lys Val Asn Met Ala Leu Gly Phe Ser Asp
        435                 440                 445
Phe Asp Leu Ser Glu Gly Asp Asp Asp Asp Asp Asp Asp Gly Glu Glu
    450                 455                 460
Glu Tyr Asn Asp Met Asp Asn Ser Glu
465                 470         473
```

<210> 838
<211> 48
<212>Amino acid
<213> Homo sapiens

<400> 838

```
Met Leu Trp Glu Thr Gly Cys Ser Ala Ala Cys Arg Val Thr Val Ser
 1               5                  10                  15
Pro Thr Val Thr Phe Ala Thr Phe Ser Thr Arg Gly Ile Asp Ala Met
            20                  25                  30
Arg Pro Gly Pro Ser Phe Leu Trp Arg Gln Gln Leu Ser Gln Gly  *
        35                  40                  45      47
```

<210> 839
<211> 116
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(116)
<223> X = any amino acid or stop code

<400> 839

```
Pro Thr Leu Gly Asp Gln Pro Asp Leu His Ser Ile Thr Arg Ala Ser
 1               5                  10                  15
Arg Pro Lys Leu Cys Thr Arg Lys Asn Cys Asn Pro Leu Thr Ile Thr
            20                  25                  30
Val His Asp Pro Asn Ser Thr Gln Xaa Tyr Tyr Gly Met Ser Trp Glu
        35                  40                  45
Leu Arg Phe Tyr Ile Pro Gly Phe Asp Val Gly Thr Met Phe Thr Ile
    50                  55                  60
Gln Lys Ile Leu Val Ser Trp Ser Pro Pro Lys Pro Ile Gly Pro Leu
65                  70                  75                  80
Thr Asp Leu Gly Asp Pro Met Phe Gln Lys Pro Pro Asn Lys Val Asp
```

```
                  85                  90                  95
Leu Thr Val Pro Pro Pro Phe Leu Val Ile Lys Asp Thr Leu Gln Lys
             100                 105                 110
Phe Glu Lys Ile
        115 116
```

<210> 840
<211> 138
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(138)
<223> X = any amino acid or stop code

<400> 840

```
Ser Leu Asn Asn Val Thr Leu Pro Gln Ala Lys Thr Glu Lys Asp Phe
  1               5                  10                  15
Ile Gln Leu Cys Thr Pro Gly Val Ile Lys Gln Glu Lys Leu Gly Thr
             20                  25                  30
Val Tyr Cys Gln Ala Ser Ser Pro Gly Ala Asn Met Ile Gly Asn Lys
         35                  40                  45
Met Ser Ala Ile Ser Val His Gly Val Ser Thr Ser Gly Gly Gln Met
     50                  55                  60
Tyr His Tyr Asp Met Asn Thr Ala Ser Leu Ser Gln Gln Xaa Asp Gln
 65                  70                  75                  80
Lys Pro Ile Phe Asn Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn
                 85                  90                  95
Trp Asn Arg Cys Gln Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly
            100                 105                 110
Thr Leu Asn Phe Pro Gly Arg Thr Val Ser Phe Ser Phe Glu Met Glu
        115                 120                 125
Ser Arg Ser Val Ala Gln Ala Gly Val Gln
    130                 135         138
```

<210> 841
<211> 82
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(82)
<223> X = any amino acid or stop code

<400> 841

```
Arg His Thr Gln Glu Cys Arg Cys Pro His Thr His Ile His Thr His
  1               5                  10                  15
Thr His Ser His Thr His Ser His Thr His Ser His Ser His Ser His
             20                  25                  30
Thr Thr Pro Arg Cys Ser His Thr Gln Pro Pro His Ala Gln Ala Pro
         35                  40                  45
Ala Leu Cys Xaa Ser Xaa Glu Asp Arg Gly Gln Pro Thr Trp Lys Leu
```

```
     50                  55                  60
Cys Ala His Arg Pro Arg Leu Lys Val Ile Lys Glu Gly Gly Trp Leu
 65                  70                  75                  80
Gly Gly
     82
```

<210> 842
<211> 58
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(58)
<223> X = any amino acid or stop code

<400> 842

```
Asn Tyr Ser Leu Ser Val Tyr Leu Val Arg Gln Leu Thr Ala Gly Thr
  1               5                  10                  15
Leu Leu Gln Lys Leu Arg Ala Lys Gly Ile Arg Asn Pro Asp His Ser
            20                  25                  30
Arg Ala Leu Ser Glu Xaa His Leu Ser Ser Leu Pro His Leu Ile Trp
        35                  40                  45
Ile Gln Val Phe Leu Ala Leu Gln Pro Ser
     50                  55          58
```

<210> 843
<211> 230
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(230)
<223> X = any amino acid or stop code

<400> 843

```
Ala Thr Tyr Ile Val Asp Phe Gly Phe Ser Thr Thr Phe Arg Glu Gly
  1               5                  10                  15
Gln Met Leu Thr Ala Phe Cys Gly Met Tyr Pro Tyr Val Ala Pro Glu
            20                  25                  30
Arg Ser Leu Gly Gln Ala Cys Gln Xaa Pro Ala Arg Asp Ile Gln Ser
        35                  40                  45
Leu Ser Val Ile Leu Tyr Phe Arg Asn Thr Val Gly Arg Arg Ala Arg
     50                  55                  60
Thr Leu Pro Phe Tyr Ser Ala Glu Ala Ser Lys Leu Gln Glu Lys Ile
 65                  70                  75                  80
Leu Thr Gly Arg Tyr His Ala Pro Pro Leu Leu Ala Leu Gln Leu Asp
                85                  90                  95
Ser Leu Ile Lys Leu Leu Met Leu Asn Ala Arg Lys Cys Pro Ser Leu
            100                 105                 110
Xaa Leu Met Lys Asn Pro Trp Val Lys Ser Ser Gln Lys Met Pro Leu
        115                 120                 125
Ile Pro Tyr Glu Glu Pro Leu Arg Gly Pro Pro Gln Thr Ile Gln Leu
```

```
    130                 135                 140
Met Val Ala Met Gly Phe Gln Ala Lys Asn Ile Ser Val Ala Ile Ile
145                 150                 155                 160
Glu Arg Lys Phe Asn Tyr Pro Met Ala Thr Tyr Leu Ile Leu Glu His
                165                 170                 175
Thr Lys Gln Glu Arg Lys Cys Ser Thr Ile Arg Glu Leu Ser Leu Pro
            180                 185                 190
Pro Gly Val Pro Thr Ser Pro Ser Pro Ser Thr Glu Leu Ser Thr Phe
        195                 200                 205
Pro Leu Ser Leu Met Arg Ala His Arg Glu Pro Ala Phe Asn Val Gln
    210                 215                 220
Pro Pro Glu Glu Ser Gln
225                 230
```

<210> 844
<211> 258
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(258)
<223> X = any amino acid or stop code

<400> 844

```
Ala Lys Gln Glu Leu Ala Lys Leu Met Arg Ile Glu Asp Pro Ser Leu
  1               5                  10                  15
Leu Asn Ser Arg Val Leu Leu His His Ala Lys Ala Gly Thr Ile Ile
            20                  25                  30
Ala Arg Gln Gly Asp Gln Asp Val Ser Leu His Phe Val Leu Trp Gly
        35                  40                  45
Cys Leu His Val Tyr Gln Arg Met Ile Asp Lys Ala Glu Asp Val Cys
    50                  55                  60
Leu Phe Val Ala Gln Pro Gly Glu Leu Val Gly Gln Leu Ala Val Leu
65                  70                  75                  80
Thr Gly Glu Pro Leu Ile Phe Thr Leu Arg Ala Gln Arg Asp Cys Thr
                85                  90                  95
Phe Leu Arg Ile Ser Lys Ser Asp Phe Tyr Glu Ile Met Arg Ala Gln
            100                 105                 110
Pro Ser Val Val Leu Ser Ala Ala His Thr Val Ala Ala Arg Met Ser
        115                 120                 125
Pro Phe Val Arg Gln Met Asp Phe Ala Ile Asp Trp Thr Ala Val Glu
    130                 135                 140
Ala Gly Arg Ala Leu Tyr Arg Cys Ser Ser His Arg Ala Ala Gln Ala
145                 150                 155                 160
Arg Pro Arg Gly Gly Asp Leu Gly Val Val Arg Pro Cys Xaa Pro Pro
                165                 170                 175
Arg Pro Leu Arg Gln Gly Asp Arg Ser Asp Cys Thr Tyr Ile Val Leu
            180                 185                 190
Asn Gly Arg Leu Arg Ser Val Ile Gln Arg Gly Ser Gly Lys Lys Glu
        195                 200                 205
Leu Val Gly Glu Tyr Gly Arg Gly Asp Leu Ile Gly Val Val Ser Ala
    210                 215                 220
Thr Pro Thr His Xaa Pro Leu Ala Phe Ser Arg Pro Val Pro Arg Gln
225                 230                 235                 240
Leu Thr Arg Ile Ile Pro Gly Asn Pro Gly Ser Gly Glu Val Phe Pro
                245                 250                 255
Gly Ala
    258
```

<210> 845
<211> 235
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(235)
<223> X = any amino acid or stop code

<400> 845

```
His Ala Ser Gly Trp Thr Pro Gly Thr Thr Gln Thr Leu Gly Gln Gly
  1               5                  10                  15
Thr Ala Trp Asp Thr Val Ala Ser Thr Pro Gly Thr Ser Glu Thr Thr
            20                  25                  30
Ala Ser Ala Glu Gly Arg Arg Thr Pro Gly Ala Thr Arg Pro Ala Ala
        35                  40                  45
Pro Gly Thr Gly Ser Trp Ala Glu Gly Ser Val Lys Ala Pro Ala Pro
    50                  55                  60
Ile Pro Glu Ser Pro Pro Ser Lys Ser Arg Ser Met Ser Asn Thr Thr
65                  70                  75                  80
Glu Gly Val Trp Glu Gly Thr Arg Ser Ser Val Thr Asn Arg Ala Arg
                85                  90                  95
Ala Ser Lys Asp Arg Arg Glu Met Thr Thr Thr Lys Ala Asp Arg Pro
            100                 105                 110
Arg Glu Asp Ile Glu Gly Val Arg Ile Ala Leu Asp Ala Ala Lys Lys
        115                 120                 125
Val Leu Gly Thr Ile Gly Pro Pro Ala Leu Val Ser Glu Thr Leu Ala
    130                 135                 140
Trp Glu Ile Leu Pro Gln Ala Thr Pro Val Ser Lys Gln Gln Ser Gln
145                 150                 155                 160
Gly Ser Ile Gly Glu Thr Thr Pro Ala Ala Gly Met Trp Thr Leu Gly
                165                 170                 175
Thr Pro Ala Ala Asp Val Trp Ile Leu Gly Thr Pro Ala Ala Asp Val
            180                 185                 190
Trp Thr Ser Met Glu Ala Ala Ser Gly Glu Gly Ser Ala Ala Gly Asp
        195                 200                 205
Leu Asp Ala Ala Thr Gly Asp Arg Gly Pro Gln Ala Thr Leu Ser Gln
    210                 215                 220
Thr Pro Ala Val Xaa Pro Trp Gly Pro Pro Gly
225                 230                 235
```

<210> 846
<211> 134
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(134)
<223> X = any amino acid or stop code

<400> 846

```
Ala Gly Thr Ser Gly Thr Gly Asp Thr Gly Pro Gly Asn Thr Ala Val
 1               5                  10                  15
Ser Gly Thr Pro Val Val Ser Pro Gly Ala Thr Pro Gly Ala Pro Gly
            20                  25                  30
Ser Ser Thr Pro Gly Glu Ala Asp Ile Gly Asn Thr Ser Phe Gly Lys
        35                  40                  45
Ser Gly Thr Pro Thr Val Ser Ala Ala Ser Thr Thr Ser Ser Pro Val
    50                  55                  60
Ser Lys His Thr Asp Ala Ala Ser Ala Thr Ala Val Thr Ile Ser Gly
65                  70                  75                  80
Ser Lys Pro Gly Thr Pro Gly Thr Pro Gly Gly Ala Thr Ser Gly Gly
                85                  90                  95
Lys Ile Thr Pro Gly Ile Ala Xaa Pro Thr Leu Asp Gln Lys Ser Pro
            100                 105                 110
Cys Phe Ser Gly Tyr Gly Gly Tyr Phe Pro Val Asn Pro His Gln Asn
        115                 120                 125
Pro Cys Ala Asp Ser Leu
    130             134
```

<210> 847
<211> 188
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(188)
<223> X = any amino acid or stop code

<400> 847

```
Arg Ala His Arg Cys Cys Leu Pro Leu Pro Ser Leu Ser Cys Glu Ile
 1               5                  10                  15
Gln Ile Gly Phe Ser Xaa Ser Ser Ile Phe Pro Gly Gln Xaa Ala Cys
            20                  25                  30
Pro Cys Ser Cys Cys Arg Ser Cys Arg Arg Asn Trp Pro Gln Ser Pro
        35                  40                  45
Arg Cys Pro His His Pro Pro Ala Pro Cys Ser Leu Leu Leu Ser Ser
    50                  55                  60
Cys Leu Pro Pro Pro Leu Ser Cys Ser Trp Arg Gly Thr Ser Gly Lys
65                  70                  75                  80
Pro Pro Ser Gln Ser Pro Ala Ala Ser Arg Ser Met Arg Pro Arg Cys
                85                  90                  95
Ser Pro Arg Thr Ser Ser Leu Arg Gly Ala Ser Cys Arg Gly Pro Gly
            100                 105                 110
Gly Ser Ala Pro Ala Ala Ala Ser Gly Pro Arg Cys Arg Gly Cys Ser
        115                 120                 125
Arg Ser Pro Arg Arg Cys Ser Arg Ser Gly Cys Ala Ala Ala Ser Pro
    130                 135                 140
Pro Arg Ser Gln Arg Arg Ser Pro Pro Leu Ser Pro Pro Pro Phe Pro
145                 150                 155                 160
Thr Ser Gly Thr Leu Leu Leu Lys Thr Ser Arg Phe Gly Ser Ala Thr
                165                 170                 175
Arg Glu Xaa Ser Ser Pro Arg Pro Arg Pro Arg Pro
            180                 185         188
```

<210> 848
<211> 328
<212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(328)
<223> X = any amino acid or stop code

<400> 848

```
Asp Asp Val Pro Pro Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly
  1               5                  10                  15
Leu Arg Arg Pro Gly Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg
            20                  25                  30
Val Leu Pro Pro Glu Val Ala Asp Gly Gly Val Val Asp Ser Gly Val
        35                  40                  45
Tyr Ala Val Pro Pro Pro Ala Glu Arg Glu Ala Pro Ala Glu Gly Lys
    50                  55                  60
Arg Leu Ser Ala Ser Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala
65                  70                  75                  80
Ser Ser Leu Glu Val Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu
                85                  90                  95
Val Ala Val Glu Ala Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr
            100                 105                 110
Val Ala His Leu Leu Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser
        115                 120                 125
Trp Arg Ser Pro Ser Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln
    130                 135                 140
Ala Ala Val Ala Ala Val Gln Ser Ala Val His Glu Leu Leu Glu Phe
145                 150                 155                 160
Ala Arg Ser Ala Val Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu
                165                 170                 175
His Ala Lys Leu Ser Arg Gln Leu Gln Lys Met Glu Asp Val His Gln
            180                 185                 190
Thr Leu Val Ala His Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser
        195                 200                 205
Gly Ala Thr Leu Glu Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala
    210                 215                 220
Val Pro Glu Asp Ala Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala
225                 230                 235                 240
Ser Leu Leu Phe Arg Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly
                245                 250                 255
Gly Gly Thr Leu His Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Gln
            260                 265                 270
Ser Arg Pro Leu Pro Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro
        275                 280                 285
Asp Gly Gln Tyr Glu Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp
    290                 295                 300
Tyr Val His Leu Thr Gly Gly Arg Arg Ser Phe Xaa Lys Thr Gln Lys
305                 310                 315                 320
Glu Leu Leu Gly Lys Arg Ala Ala
                325         328
```

<210> 849
<211> 98
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(98)

<223> X = any amino acid or stop code

<400> 849

```
Met Ala Thr Asp Glu Glu Asn Val Tyr Gly Leu Glu Glu Asn Ala Gln
  1               5                  10                  15
Ser Arg Gln Glu Ser Thr Arg Arg Leu Ile Leu Val Gly Arg Thr Gly
             20                  25                  30
Ala Gly Lys Ser Ala Thr Gly Asn Ser Ile Leu Gly Gln Arg Arg Phe
         35                  40                  45
Phe Ser Arg Leu Gly Ala Thr Ser Val Thr Arg Ala Cys Thr Thr Gly
     50                  55                  60
Ser Arg Arg Trp Asp Lys Cys His Val Glu Val Val Asp Thr Pro Asp
 65                  70                  75                  80
Ile Phe Ser Ser Gln Val Ser Lys Thr Asp Pro Gly Cys Glu Glu Arg
                 85                  90                  95
Xaa  *
 97
```

<210> 850
<211> 94
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(94)
<223> X = any amino acid or stop code

<400> 850

```
Thr Leu Gly Leu Arg Ser Leu Thr Lys Glu Gly Gly Gly Gly Gly Asp
  1               5                  10                  15
Val Ala Ala Phe Glu Val Gly Thr Gly Ala Ala Ala Ser Arg Ala Leu
             20                  25                  30
Gly Gln Cys Gly Gln Leu Gln Lys Leu Ile Val Ile Phe Ile Gly Ser
         35                  40                  45
Leu Cys Gly Leu Cys Thr Lys Cys Ala Val Ser Asn Asp Leu Thr Gln
     50                  55                  60
Gln Glu Ile Gln Thr Pro Glu Ile Gln Gln Arg Asn Ala Xaa Cys Asp
 65                  70                  75                  80
Ser Arg Val Thr Phe Thr Asn Glu Gly Gly Arg Trp Trp Gly
                 85                  90                  94
```

<210> 851
<211> 50
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(50)
<223> X = any amino acid or stop code

<400> 851
Phe Phe Phe Leu Val Glu Thr Arg Phe His His Ile Gly Gln Ala Gly
1 5 10 15
Leu Glu Leu Leu Thr Leu Ser Ile Lys Xaa Ser Ala Arg Leu Gly Leu
20 25 30
Pro Lys Cys Trp Asp Asp Arg Arg Glu Pro Pro Tyr Leu Ala Gly Phe
35 40 45
Met Ile
50

<210> 852
<211> 143
<212>Amino acid
<213> Homo sapiens

<400> 852
Arg Arg Ser Pro Pro Pro Ala Pro Pro Pro Leu Pro Ser Pro Leu Ser
1 5 10 15
Pro Pro Pro Arg Ala Pro Val Ser Pro Ala Ser Thr Met Pro Ile Leu
20 25 30
Leu Phe Leu Ile Asp Thr Ser Ala Ser Met Asn Gln Arg Ser His Leu
35 40 45
Gly Thr Thr Tyr Leu Asp Thr Ala Lys Gly Ala Val Glu Thr Phe Met
50 55 60
Lys Leu Arg Ala Arg Asp Pro Ala Ser Arg Gly Asp Arg Tyr Met Leu
65 70 75 80
Val Thr Phe Glu Glu Pro Pro Tyr Ala Ile Lys Ala Gly Trp Lys Glu
85 90 95
Asn His Ala Thr Phe Met Asn Glu Leu Lys Asn Leu Gln Ala Glu Gly
100 105 110
Leu Thr Thr Leu Gly Gln Ser Leu Arg Thr Ala Phe Asp Leu Leu Asn
115 120 125
Leu Asn Arg Leu Val Thr Gly Ile Asp Asn Tyr Gly Gln Val Gly
130 135 140 143

<210> 853
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 853
Asn Cys Arg Thr Tyr Val Phe Cys Phe Val Leu Val Phe Arg Leu Leu
1 5 10 15
Phe Leu His Gly Ser Pro Leu Ser Pro Ser Leu Leu Ser Arg Ala Gly
20 25 30
Leu Leu Cys Gly Ser Ala Glu Asn Pro Thr Pro Phe Leu Cys Gly Ile
35 40 45
Thr Met Ala Ala Gly Val Ser Leu Leu Ala Leu Val Val Arg Val Ile
50 55 60
Leu Ser Thr Ala Ile Leu Cys Pro Ser Gly Ala Ser Arg Arg Gln Arg
65 70 75 80
Ser Ser Glu Val Glu Trp Gly Thr Asp Ser Gly Val Tyr Arg Leu Tyr

```
                  85                  90                  95
Cys Trp Arg Val Gly Phe Leu Gly Pro Gly Gly Glu Leu Arg Leu Gly
            100                 105                 110
Leu Ser Glu Ala Arg Gly Gly Arg Val Trp Gly Arg Gly Glu Lys Arg
        115                 120                 125
Cys Arg Val Trp Ala Val Arg Ser Leu Arg Lys Gly Phe Gly Ser Val
    130                 135                 140
Ala Ala Leu Arg Arg Gly Ile Trp Ala Gly
145                 150             154
```

<210> 854
<211> 90
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(90)
<223> X = any amino acid or stop code

<400> 854

```
Val Thr Pro Thr Pro Pro Gln Tyr Tyr Thr Cys Ser Cys Val Leu Gly
  1                 5                  10                  15
Phe Ile Ala Cys Ser Ile Phe Leu Gln Met Ser Leu Lys Pro Lys Val
             20                  25                  30
Met Leu Leu Thr Val Ala Leu Val Ala Cys Leu Val Leu Phe Asn Leu
         35                  40                  45
Ser Gln Cys Trp Gln Arg Asp Cys Cys Ser Gln Gly Leu Gly Asn Leu
     50                  55                  60
Thr Glu Pro Ser Gly Thr Asn Arg Xaa Gly Pro Ala Ala Val Ser Trp
 65                  70                  75                  80
Ala Ser Leu Pro Ala Pro Ser Ser Cys Arg
                 85                  90
```

<210> 855
<211> 61
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(61)
<223> X = any amino acid or stop code

<400> 855

```
Gly Lys Ala Gly Gly Ala Ala Gly Leu Phe Ala Lys Gln Val Gln Lys
  1                 5                  10                  15
Lys Phe Ser Arg Ala Gln Glu Lys Xaa Thr Arg Arg Phe Gly Lys Thr
             20                  25                  30
Cys Gln Pro Glu Glu Arg Ala Arg Glu Glu Arg Gln Glu Gly Pro Glu
         35                  40                  45
Ile Glu Phe Gly Phe Ser Phe Phe Ser Leu Ser Leu Tyr
     50                  55                  60  61
```

<210> 856
<211> 779
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(779)
<223> X = any amino acid or stop code

<400> 856

```
Pro Lys Arg Leu Phe Leu Phe Gln Asp Val Asn Thr Leu Gln Gly Gly
 1               5                  10                  15
Gly Gln Pro Val Val Thr Pro Ser Val Gln Pro Ser Leu Gln Pro Ala
            20                  25                  30
His Pro Ala Leu Pro Gln Met Thr Ser Gln Ala Pro Gln Pro Ser Val
        35                  40                  45
Thr Gly Leu Gln Ala Pro Ser Ala Ala Leu Met Gln Val Ser Ser Leu
    50                  55                  60
Asp Ser His Ser Ala Val Ser Gly Asn Ala Gln Ser Phe Gln Pro Tyr
65                  70                  75                  80
Ala Gly Met Gln Ala Tyr Ala Tyr Pro Gln Ala Ser Ala Val Thr Ser
                85                  90                  95
Gln Leu Gln Pro Val Arg Pro Leu Tyr Pro Ala Pro Leu Ser Gln Pro
            100                 105                 110
Pro His Phe Gln Gly Ser Gly Asp Met Ala Ser Phe Leu Met Thr Glu
        115                 120                 125
Ala Arg Gln His Asn Thr Glu Ile Arg Met Ala Val Ser Lys Val Ala
    130                 135                 140
Asp Lys Met Asp His Leu Met Thr Lys Val Glu Glu Leu Gln Lys His
145                 150                 155                 160
Ser Ala Gly Asn Ser Met Leu Ile Pro Ser Met Ser Val Thr Met Glu
                165                 170                 175
Thr Ser Met Ile Met Ser Asn Ile Gln Arg Ile Ile Gln Glu Asn Glu
            180                 185                 190
Arg Leu Lys Gln Glu Ile Leu Glu Lys Ser Asn Arg Ile Glu Glu Gln
        195                 200                 205
Asn Asp Lys Ile Ser Glu Leu Ile Glu Arg Asn Gln Arg Tyr Val Glu
    210                 215                 220
Gln Ser Asn Leu Met Met Glu Lys Arg Asn Asn Ser Leu Gln Thr Ala
225                 230                 235                 240
Thr Glu Asn Thr Gln Ala Arg Val Leu His Ala Glu Gln Glu Lys Ala
                245                 250                 255
Lys Val Thr Glu Glu Leu Ala Ala Ala Thr Ala Gln Val Ser His Leu
            260                 265                 270
Gln Leu Lys Met Thr Ala His Gln Lys Lys Glu Thr Glu Leu Gln Met
        275                 280                 285
Gln Leu Thr Glu Ser Leu Lys Glu Thr Asp Leu Leu Arg Gly Gln Leu
    290                 295                 300
Thr Lys Val Gln Ala Lys Leu Ser Glu Leu Gln Glu Thr Ser Glu Gln
305                 310                 315                 320
Ala Gln Ser Lys Phe Lys Ser Glu Lys Gln Asn Arg Lys Gln Leu Glu
                325                 330                 335
Leu Lys Val Thr Ser Leu Glu Glu Glu Leu Thr Asp Leu Arg Val Glu
            340                 345                 350
Lys Glu Ser Leu Glu Lys Asn Leu Ser Glu Arg Lys Lys Lys Ser Ala
        355                 360                 365
Gln Glu Arg Ser Gln Ala Glu Glu Glu Ile Asp Glu Ile Arg Lys Ser
    370                 375                 380
```

```
Tyr Gln Glu Glu Leu Asp Lys Leu Arg Gln Leu Leu Lys Lys Thr Arg
385                 390                 395                 400
Val Ser Thr Asp Gln Ala Ala Ala Glu Gln Leu Ser Leu Val Gln Ala
                405                 410                 415
Glu Leu Gln Thr Gln Trp Glu Ala Lys Cys Glu His Leu Leu Ala Ser
            420                 425                 430
Ala Lys Asp Glu His Leu Gln Gln Tyr Gln Glu Val Cys Ala Gln Arg
        435                 440                 445
Asp Ala Tyr Gln Gln Lys Leu Val Gln Leu Gln Glu Lys Ser Val Cys
    450                 455                 460
Phe Ala Cys Leu Ala Leu Gln Ala Gln Ile Thr Ala Leu Thr Lys Gln
465                 470                 475                 480
Asn Glu Gln His Ile Lys Glu Leu Glu Lys Asn Lys Ser Gln Met Ser
                485                 490                 495
Gly Val Glu Ala Ala Ala Ser Asp Pro Ser Glu Lys Val Lys Lys Ile
            500                 505                 510
Met Asn Gln Val Phe Gln Ser Leu Arg Arg Glu Phe Glu Leu Glu Glu
        515                 520                 525
Ser Tyr Asn Gly Arg Thr Ile Leu Gly Thr Ile Met Asn Thr Ile Lys
    530                 535                 540
Met Val Thr Leu Gln Leu Leu Asn Gln Gln Glu Gln Glu Lys Glu Glu
545                 550                 555                 560
Ser Ser Ser Glu Glu Glu Glu Glu Lys Ala Glu Glu Arg Pro Arg Arg
                565                 570                 575
Pro Ser Gln Glu Gln Ser Ala Ser Ala Ser Ser Gly Gln Pro Gln Ala
            580                 585                 590
Pro Leu Asn Arg Glu Arg Pro Glu Ser Pro Met Val Pro Ser Glu Gln
        595                 600                 605
Val Val Glu Glu Ala Val Pro Leu Pro Pro Gln Ala Leu Thr Thr Ser
    610                 615                 620
Gln Asp Gly His Arg Arg Lys Gly Asp Ser Glu Ala Glu Ala Leu Ser
625                 630                 635                 640
Glu Ile Lys Asp Gly Ser Leu Pro Pro Glu Leu Ser Cys Ile Pro Ser
                645                 650                 655
His Arg Val Leu Gly Pro Pro Thr Ser Ile Pro Pro Glu Pro Leu Gly
            660                 665                 670
Pro Val Ser Met Asp Ser Glu Cys Glu Glu Ser Leu Ala Ala Ser Pro
        675                 680                 685
Met Ala Ala Lys Pro Asp Asn Pro Ser Gly Lys Val Cys Val Gln Gly
    690                 695                 700
Lys Xaa Ala Pro Asp Gly Pro Thr Tyr Lys Glu Ser Ser Thr Arg Leu
705                 710                 715                 720
Phe Pro Gly Phe Gln Asp Pro Glu Glu Gly Asp Pro Leu Ala Leu Gly
                725                 730                 735
Leu Glu Ser Pro Gly Glu Pro Gln Pro Pro Gln Leu Gln Gly Lys Val
            740                 745                 750
Asp Val His Xaa Val Pro Pro Val Pro His Lys Gly Ala Phe Gln Glu
        755                 760                 765
Gln Glu Gly Arg Phe Pro Gln Phe Cys Arg Glu
    770                 775                 779
```

<210> 857
<211> 510
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(510)
<223> X = any amino acid or stop code

<400> 857

```
Ser Glu Thr Ala Gln Gln Ile Ile Asp Arg Leu Arg Val Lys Leu Ala
 1               5                  10                  15
Lys Glu Pro Gly Ala Asn Leu Phe Leu Met Ala Val Gln Asp Ile Arg
            20                  25                  30
Val Gly Gly Arg Gln Ser Asn Ala Ser Tyr Gln Tyr Thr Leu Leu Ser
        35                  40                  45
Asp Asp Leu Ala Ala Leu Arg Glu Trp Glu Pro Lys Ile Arg Lys Lys
    50                  55                  60
Leu Ala Thr Leu Pro Glu Leu Ala Asp Val Asn Ser Asp Gln Gln Asp
65                  70                  75                  80
Asn Gly Ala Glu Met Asn Leu Val Tyr Asp Arg Asp Thr Met Ala Arg
                85                  90                  95
Leu Gly Ile Asp Val Gln Ala Ala Asn Ser Leu Leu Asn Asn Ala Phe
            100                 105                 110
Gly Gln Arg Gln Ile Ser Thr Ile Tyr Gln Pro Met Asn Gln Tyr Lys
        115                 120                 125
Val Val Met Glu Val Asp Pro Arg Tyr Thr Gln Asp Ile Ser Ala Leu
    130                 135                 140
Glu Lys Met Phe Val Ile Asn Asn Glu Gly Lys Ala Ile Pro Leu Ser
145                 150                 155                 160
Tyr Phe Ala Lys Trp Gln Pro Ala Asn Ala Pro Leu Ser Val Asn His
                165                 170                 175
Gln Gly Leu Ser Ala Ala Leu Thr Ile Ser Phe Asn Leu Pro Thr Gly
            180                 185                 190
Lys Ser Leu Ser Asp Ala Ser Ala Ala Ile Asp Arg Ala Met Ser Gln
        195                 200                 205
Leu Gly Val Pro Ser Thr Val Arg Gly Ser Phe Ala Gly Pro Ala Gln
    210                 215                 220
Val Phe Gln Glu Thr Met Asn Ser Gln Val Ile Leu Ile Ile Ala Ala
225                 230                 235                 240
Ile Ala Thr Val Tyr Ile Val Leu Gly Ile Pro Tyr Glu Arg Tyr Val
                245                 250                 255
His Pro Pro Thr Ile Leu Leu Xaa Arg Pro Gly Ala Asn Leu Phe Leu
            260                 265                 270
Met Ala Val Gln Asp Ile Arg Val Gly Gly Arg Gln Ser Asn Ala Ser
        275                 280                 285
Tyr Gln Tyr Thr Leu Leu Ser Asp Asp Leu Ala Ala Leu Arg Glu Trp
    290                 295                 300
Glu Pro Lys Ile Arg Lys Lys Leu Ala Thr Leu Pro Glu Leu Ala Asp
305                 310                 315                 320
Val Asn Ser Asp Gln Gln Asp Asn Gly Ala Glu Met Asn Leu Val Tyr
                325                 330                 335
Asp Arg Asp Thr Met Ala Arg Leu Gly Ile Asp Val Gln Ala Ala Asn
            340                 345                 350
Ser Leu Leu Asn Asn Ala Phe Gly Gln Arg Gln Ile Ser Thr Ile Tyr
        355                 360                 365
Gln Pro Met Asn Gln Tyr Lys Val Val Met Glu Val Asp Pro Arg Tyr
    370                 375                 380
Thr Gln Asp Ile Ser Ala Leu Glu Lys Met Phe Val Ile Asn Asn Glu
385                 390                 395                 400
Gly Lys Ala Ile Pro Leu Ser Tyr Phe Ala Lys Trp Gln Pro Ala Asn
                405                 410                 415
Ala Pro Leu Ser Val Asn His Gln Gly Leu Ser Ala Ala Leu Thr Ile
            420                 425                 430
Ser Phe Asn Leu Pro Thr Gly Lys Ser Leu Ser Asp Ala Ser Ala Ala
        435                 440                 445
Ile Asp Arg Ala Met Ser Gln Leu Gly Val Pro Ser Thr Val Arg Gly
    450                 455                 460
Ser Phe Ala Gly Pro Ala Gln Val Phe Gln Glu Thr Met Asn Ser Gln
465                 470                 475                 480
Val Ile Leu Ile Ile Ala Ala Ile Ala Thr Val Tyr Ile Val Leu Gly
```

```
                485                 490                 495
Ile Pro Tyr Glu Arg Tyr Val His Pro Pro Thr Ile Leu Leu
            500                 505                 510
```

<210> 858
<211> 137
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(137)
<223> X = any amino acid or stop code

<400> 858

```
Ile Ile Thr Pro Asp Ala Met Gly Cys Gln Lys Asp Ile Ala Glu Lys
  1               5                  10                  15
Ile Gln Lys Gln Gly Gly Asp Tyr Leu Phe Ala Val Lys Gly Asn Gln
             20                  25                  30
Gly Arg Leu Asn Lys Ala Phe Glu Glu Lys Phe Pro Leu Lys Glu Leu
         35                  40                  45
Asn Asn Pro Glu His Asp Ser Tyr Ala Ile Ser Glu Lys Ser His Gly
     50                  55                  60
Arg Glu Glu Ile Arg Leu His Ile Val Cys Asp Val Pro Asp Glu Leu
 65                  70                  75                  80
Ile Asp Phe Thr Phe Glu Trp Lys Gly Leu Lys Lys Leu Cys Val Ala
                 85                  90                  95
Val Ser Phe Arg Ser Ile Ile Ala Glu Gln Lys Lys Glu Pro Glu Met
            100                 105                 110
Thr Val Arg Tyr Asn Ile Ser Xaa Leu Gly Ile Ala Gly Asp Ile Ser
        115                 120                 125
Val Thr Ala Ile Ser Gly Thr Asp Asp
    130                 135     137
```

<210> 859
<211> 123
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(123)
<223> X = any amino acid or stop code

<400> 859

```
His Tyr Leu Lys Met Leu Thr Gln Ala Arg Arg Glu Val Ile Ile Ala
  1               5                  10                  15
Asn Ala Tyr Phe Phe Pro Gly Tyr Arg Phe Leu His Ala Leu Arg Lys
             20                  25                  30
Ala Ala Arg Arg Gly Val Arg Ile Lys Leu Ile Ile Gln Gly Glu Pro
         35                  40                  45
Asp Met Pro Ile Val Arg Val Gly Ala Arg Leu Leu Tyr Asn Tyr Leu
     50                  55                  60
Val Lys Gly Gly Val Gln Val Phe Glu Tyr Arg Arg Arg Pro Leu His
```

```
 65                  70                  75                  80
Gly Lys Val Ala Leu Met Asp Asp His Trp Ala Thr Val Gly Ser Ser
                 85                  90                  95
Asn Leu His Pro Val Ser Xaa Ser Gly Asn Leu Gln Ala Asn Val Ile
            100                 105                 110
Leu His Val Leu Arg Val Pro Thr Leu Asn Pro
        115                 120         123
```

<210> 860
<211> 190
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(190)
<223> X = any amino acid or stop code

<400> 860

```
Cys Trp Ser Lys Ser Ala Ala Phe His Ser Lys Leu Ala Thr Thr Cys
  1               5                  10                  15
Ile Val Pro Val Cys Ala Ala Gly His Cys Ser Ala Ala Trp Xaa Ser
            20                  25                  30
Leu Arg Pro Ile Glu Ala Leu Ala Lys Glu Val Arg Glu Leu Lys Xaa
        35                  40                  45
His Thr Arg Xaa Leu Leu Asn Pro Ala Thr Thr Arg Glu Leu Thr Ser
    50                  55                  60
Leu Gly Arg Asn Leu Asn Arg Leu Leu Lys Ser Glu Arg Glu Arg Tyr
65                  70                  75                  80
Asp Lys Tyr Arg Thr Thr Leu Thr Asp Leu Thr His Ser Leu Lys Thr
                85                  90                  95
Pro Leu Ala Val Leu Gln Ser Thr Leu Arg Ser Leu Arg Ser Glu Lys
            100                 105                 110
Met Ser Val Ser Asp Ala Glu Pro Val Met Leu Glu Gln Ile Ser Arg
        115                 120                 125
Ile Ser Gln Gln Ile Gly Tyr Tyr Leu His Arg Ala Ser Met Arg Gly
    130                 135                 140
Gly Thr Leu Leu Ser Arg Glu Leu His Pro Val Ala Pro Leu Leu Asp
145                 150                 155                 160
Asn Leu Thr Ser Ala Leu Ile Lys Gly Lys Pro Arg Lys Gly Gly Asn
                165                 170                 175
Val Thr Val Phe Pro Phe Thr Ala Met Tyr Arg Asp Gly His
            180                 185                 190
```

<210> 861
<211> 241
<212>Amino acid
<213> Homo sapiens

<400> 861

```
Gly Asn Thr Val Met Phe Gln His Leu Met Gln Lys Arg Lys His Thr
  1               5                  10                  15
Gln Trp Thr Tyr Gly Pro Leu Thr Ser Thr Leu Tyr Asp Leu Thr Glu
            20                  25                  30
```

```
Ile Asp Ser Ser Gly Asp Glu Gln Ser Leu Leu Glu Leu Ile Ile Thr
          35                  40                  45
Thr Lys Lys Arg Glu Ala Arg Gln Ile Leu Asp Gln Thr Pro Val Lys
      50                  55                  60
Glu Leu Val Ser Leu Lys Trp Lys Arg Tyr Gly Arg Pro Tyr Phe Cys
 65                  70                  75                  80
Met Leu Gly Ala Ile Tyr Leu Leu Tyr Ile Ile Cys Phe Thr Met Cys
                 85                  90                  95
Cys Ile Tyr Arg Pro Leu Lys Pro Arg Thr Asn Asn Arg Thr Ser Pro
            100                 105                 110
Arg Asp Asn Thr Leu Leu Gln Gln Lys Leu Leu Gln Glu Ala Tyr Met
        115                 120                 125
Thr Pro Lys Asp Asp Ile Arg Leu Val Gly Glu Leu Val Thr Val Ile
    130                 135                 140
Gly Ala Ile Ile Ile Leu Leu Val Glu Val Pro Asp Ile Phe Arg Met
145                 150                 155                 160
Gly Val Thr Arg Phe Phe Gly Gln Thr Ile Leu Gly Gly Pro Phe His
                165                 170                 175
Val Leu Ile Ile Thr Tyr Ala Phe Met Val Leu Val Thr Met Val Met
            180                 185                 190
Arg Leu Ile Ser Ala Ser Gly Glu Val Val Pro Met Ser Phe Ala Leu
        195                 200                 205
Val Leu Gly Trp Cys Asn Val Met Tyr Phe Ala Arg Gly Phe Gln Met
    210                 215                 220
Leu Gly Pro Phe Thr Ile Met Ile Gln Lys Met Ile Phe Gly Asp Leu
225                 230                 235                 240
Met
241
```

<210> 862
<211> 45
<212>Amino acid
<213> Homo sapiens

<400> 862

```
Glu Lys Ala Ala Ala Ala Asn Ile Asp Glu Val Gln Lys Ser Asp Val
  1               5                  10                  15
Ser Ser Thr Gly Gln Gly Val Ile Asp Lys Asp Ala Leu Gly Pro Met
             20                  25                  30
Met Leu Glu Val Ala His Leu His Phe Ser Ala Val Phe
         35                  40                  45
```

<210> 863
<211> 120
<212>Amino acid
<213> Homo sapiens

<400> 863

```
Leu Glu Val Pro Ser Glu Val Thr Pro Leu Gly Phe Ala Met Gln Ala
  1               5                  10                  15
Thr Lys Thr Leu Leu Leu Arg Thr Cys Cys Leu Gln Glu Phe Asn Ile
             20                  25                  30
Met Glu Lys Asn Lys Gly Trp Ala Leu Leu Gly Gly Lys Asp Gly His
         35                  40                  45
```

```
Leu Gln Gly Leu Phe Leu Leu Ala Asn Ala Leu Leu Glu Arg Asn Gln
     50                  55                  60
Leu Leu Ala Gln Lys Val Met Tyr Leu Leu Val Pro Leu Leu Asn Arg
 65                  70                  75                  80
Gly Asn Asp Lys His Lys Leu Thr Ser Ala Gly Phe Phe Val Glu Leu
                 85                  90                  95
Leu Arg Ser Pro Val Ala Lys Arg Leu Pro Ser Ile Tyr Ser Val Ala
            100                 105                 110
Arg Phe Lys Asp Trp Leu Gln Asp
        115                 120
```

<210> 864
<211> 124
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(124)
<223> X = any amino acid or stop code

<400> 864

```
Arg Pro Ala Pro Ala Pro Ser Ala Ala Pro Glu Glu Ala Pro Ser Pro
  1               5                  10                  15
Gly Val Lys Gly Arg Gly Met Ala Lys Arg Arg Val Pro Ala Pro Val
            20                  25                  30
Trp Gly Gly Ala Gly Gly Gly Thr Lys Ser Ala Arg Arg Ala Ala Ala
        35                  40                  45
Ala Pro Asp Thr Glu Arg Ser Glu Glu Gly Gly Arg Ala Val Lys Glu
    50                  55                  60
Ala Tyr Pro Ser Ser Arg Gln Pro Pro Pro Pro Ser Pro Xaa Pro Leu
 65                  70                  75                  80
Arg Cys Ala Arg Arg Cys His Pro Asn Leu Ala Pro Ser Met Pro Ile
                85                  90                  95
Ser Asn Arg Glu Gly Lys Gly Lys Arg Arg Glu Glu Lys Ile Arg Pro
            100                 105                 110
Leu Ser Pro Ala Ser Thr His Thr Ser Ala Arg Ala
        115                 120             124
```

<210> 865
<211> 120
<212>Amino acid
<213> Homo sapiens

<400> 865

```
Leu Gln Gly Val His Gly Ser Ser Ser Thr Phe Cys Ser Ser Leu Ser
  1               5                  10                  15
Ser Asp Phe Asp Pro Leu Glu Tyr Cys Ser Pro Lys Gly Asp Pro Gln
            20                  25                  30
Arg Val Asp Met Gln Pro Ser Val Thr Ser Arg Pro Arg Ser Leu Asp
        35                  40                  45
Ser Glu Val Pro Thr Gly Glu Thr Gln Val Ser Ser His Val His Tyr
    50                  55                  60
His Arg His Arg His His His Tyr Lys Lys Arg Phe Gln Arg His Gly
```

```
 65                  70                  75                  80
Arg Lys Pro Gly Pro Glu Thr Gly Val Pro Gln Ser Arg Pro Pro Ile
                85                  90                  95
Pro Arg Thr Gln Pro Gln Pro Glu Pro Pro Ser Pro Asp Gln Gln Val
            100                 105                 110
Thr Arg Ser Asn Ser Ala Ala Pro
        115                 120
```

<210> 866
<211> 82
<212>Amino acid
<213> Homo sapiens

<400> 866

```
Met Ala Asp Pro Asp Pro Arg Tyr Pro Arg Ser Ser Ile Glu Asp Asp
  1               5                  10                  15
Phe Asn Tyr Gly Ser Ser Glu Ala Ser Asp Thr Val His Ile Arg Met
            20                  25                  30
Ala Phe Leu Arg Arg Val Tyr Ser Ile Leu Ser Leu Gln Asp Leu Leu
        35                  40                  45
Ala Thr Val Thr Ser Thr Asp Asn Leu Ala Phe Glu Asp Gly Arg Thr
    50                  55                  60
Asp Trp Leu Gln Arg Pro Asp Cys Val Ser Phe Lys Ile His Val Leu
 65                  70                  75                  80
Pro Met
     82
```

<210> 867
<211> 60
<212>Amino acid
<213> Homo sapiens

<400> 867

```
Ala Gly Met Ser Val Val Val Val Pro Pro Ile Gly Ser Ser Tyr Leu
  1               5                  10                  15
Gly Leu Ile Ser Gln Glu His Phe Pro Asn Glu Phe Thr Ser Gly Asp
            20                  25                  30
Gly Lys Lys Ala His Gln Asp Phe Gly Tyr Phe Tyr Gly Ser Ser Tyr
        35                  40                  45
Val Ala Ala Ser Asp Ser Ser Arg Thr Pro Gly Leu
    50                  55                  60
```

<210> 868
<211> 78
<212>Amino acid
<213> Homo sapiens

<400> 868

```
Val Ala Ala Ala Leu Thr Leu Phe Pro Gln Gln Leu Ser Pro Pro Gly
```

```
  1               5                  10                  15
Ala Trp Gly Leu Gly Leu Ser Ala Cys Phe Cys Cys Ala Glu Gly Phe
             20                  25                  30
Ser Arg Leu Asn Gln Gln Val Leu Ser Ser Ser Leu Leu Leu Leu Ser
         35                  40                  45
Arg Thr Asn Cys Pro Cys Lys Tyr Ser Phe Leu Asp Asn Leu Lys Lys
     50                  55                  60
Leu Thr Pro Arg Arg Asp Val Pro Thr Tyr Pro Lys Val Arg
 65                  70                  75          78
```

<210> 869
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 869

```
Arg Asp Asp Ala Cys Leu Tyr Ser Pro Ala Ser Ala Pro Glu Val Ile
  1               5                  10                  15
Thr Val Gly Ala Thr Asn Ala Gln Asp Gln Pro Val Thr Leu Gly Thr
             20                  25                  30
Leu Gly Thr Asn Phe Gly Arg Cys Val Asp Leu Phe Ala Pro Gly Glu
         35                  40                  45
Asp Ile Ile Gly Ala Ser Ser Asp Cys Ser Thr Cys Phe Val Ser Gln
     50                  55                  60
Ser Gly Thr Ser Gln Ala Ala Ala His Val Ala Gly Ile Ala Ala Met
 65                  70                  75                  80
Met Leu Ser Ala Glu Pro Glu Leu Thr Leu Ala Glu Leu Arg Gln Arg
                 85                  90                  95
Leu Ile His Phe Ser Ala Lys Asp Val Ile Asn Glu Ala Trp Phe Pro
            100                 105                 110
Glu Asp Gln Arg Val Leu Thr
        115             119
```

<210> 870
<211> 34
<212>Amino acid
<213> Homo sapiens

<400> 870

```
Leu Glu Ile Lys Phe Leu Glu Gln Val Asp Gln Phe Tyr Asp Asp Asn
  1               5                  10                  15
Phe Pro Met Glu Ile Arg His Leu Leu Ala Gln Trp Ile Glu Asn Gln
             20                  25                  30
Asp Trp
     34
```

<210> 871
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 871

```
Glu Ala Gly Asp Ala Asp Glu Asp Glu Ala Asp Ala Asn Ser Ser Asp
 1               5                  10                  15
Cys Glu Pro Glu Gly Pro Val Glu Ala Glu Glu Pro Pro Gln Glu Asp
            20                  25                  30
Ser Ser Ser Gln Ser Asp Ser Val Glu Asp Arg Ser Glu Asp Glu Glu
        35                  40                  45
Asp Glu His Ser Glu Glu Glu Glu Thr Ser Gly Ser Ser Ala Ser Glu
    50                  55                  60
Glu Ser Glu Ser Glu Glu Ser Glu Asp Ala Gln Ser Gln Ser Gln Ala
65                  70                  75                  80
Asp Glu Glu Glu Glu Asp Asp Asp Phe Gly Val Glu Tyr Leu Leu Ala
                85                  90                  95
Arg Asp Glu Glu Gln Ser Glu Ala Asp Ala Gly Ser Gly Pro Pro Thr
            100                 105                 110
Pro Gly Pro Thr Thr Leu Gly Pro Lys Lys Glu Ile Thr Asp Ile Ala
        115                 120                 125
Ala Ala Ala Glu Ser Leu Gln Pro Lys Gly Tyr Thr Leu Ala Thr Thr
    130                 135                 140
Gln Val Lys Thr Pro Ile Pro Leu Leu Leu
145                 150                 154
```

<210> 872
<211> 118
<212>Amino acid
<213> Homo sapiens

<400> 872

```
Leu Lys Asn Leu Arg Glu Leu Leu Leu Glu Asp Asn Gln Leu Pro Gln
 1               5                  10                  15
Ile Pro Ser Gly Leu Pro Glu Ser Leu Thr Glu Leu Ser Leu Ile Gln
            20                  25                  30
Thr Asn Ile Tyr Asn Ile Thr Lys Glu Gly Ile Ser Arg Leu Ile Asn
        35                  40                  45
Leu Lys Asn Leu Tyr Leu Ala Trp Asn Cys Tyr Phe Asn Lys Val Cys
    50                  55                  60
Glu Lys Thr Asn Ile Glu Asp Gly Val Phe Glu Thr Leu Thr Asn Leu
65                  70                  75                  80
Glu Leu Leu Ser Leu Ser Phe Asn Ser Leu Ser His Val Pro Pro Lys
                85                  90                  95
Leu Pro Ser Ser Leu Arg Lys Leu Phe Leu Ser Asn Thr Gln Ile Lys
            100                 105                 110
Tyr Ile Ser Glu Glu Asp
        115                 118
```

<210> 873
<211> 42
<212>Amino acid
<213> Homo sapiens

<400> 873

```
Met Arg Ser Gln Ala Leu Gly Gln Ser Ala Pro Ser Leu Thr Ala Ser
```

```
  1               5                  10                  15
Leu Lys Glu Leu Ser Leu Pro Arg Arg Gly Ser Phe Pro Val Cys Pro
             20                  25                  30
Asn Ala Gly Arg Thr Ser Pro Leu Gly  *
         35                  40  41
```

<210> 874
<211> 70
<212>Amino acid
<213> Homo sapiens

<400> 874

```
Leu Leu Cys Val Cys Leu Pro Val Gly Ala Cys Pro Ser Leu Ser Leu
  1               5                  10                  15
Leu Thr Ala Pro Leu Asn Gln Leu Met Arg Cys Leu Arg Lys Tyr Gln
             20                  25                  30
Ser Arg Thr Pro Ser Pro Leu Leu His Ser Val Pro Ser Glu Ile Val
         35                  40                  45
Phe Asp Phe Glu Pro Gly Pro Val Phe Arg Gly Ser Trp Ala Leu Leu
     50                  55                  60
Ser Trp Ser Thr Arg Pro
 65                  70
```

<210> 875
<211> 41
<212>Amino acid
<213> Homo sapiens

<400> 875

```
Gln Thr Pro Asp Lys Lys Gln Asn Asp Gln Arg Asn Arg Lys Arg Lys
  1               5                  10                  15
Ala Glu Pro Tyr Glu Thr Ser Gln Gly Ser Asn Asn Phe Val Ser Thr
             20                  25                  30
Lys Val Leu Asn Ser Asn Val Leu Arg
         35                  40  41
```

<210> 876
<211> 139
<212>Amino acid
<213> Homo sapiens

<400> 876

```
Tyr Phe Ile Ile Lys Gly Met Val Glu Leu Val Pro Ala Ser Asp Thr
  1               5                  10                  15
Leu Arg Lys Ile Gln Val Glu Tyr Gly Val Thr Gly Ser Phe Lys Asp
             20                  25                  30
Lys Pro Leu Ala Glu Trp Leu Arg Lys Tyr Asn Pro Ser Glu Glu Glu
         35                  40                  45
Tyr Glu Lys Ala Ser Glu Asn Phe Ile Tyr Ser Cys Ala Gly Cys Cys
```

```
     50                  55                  60
Val Ala Thr Tyr Val Leu Gly Ile Cys Asp Arg His Asn Asp Asn Ile
 65                  70                  75                  80
Met Leu Arg Ser Thr Gly His Met Phe His Ile Asp Phe Gly Lys Phe
                85                  90                  95
Leu Gly His Ala Gln Met Phe Gly Ser Phe Lys Arg Asp Arg Ala Pro
            100                 105                 110
Phe Val Leu Thr Ser Asp Met Ala Tyr Val Ile Asn Gly Gly Glu Lys
        115                 120                 125
Pro Thr Ile Arg Phe Gln Leu Phe Val Asp Leu
    130                 135             139
```

<210> 877
<211> 350
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(350)
<223> X = any amino acid or stop code

<400> 877

```
Pro Ser Pro Leu Pro Ser Leu Ser Leu Pro Pro Pro Val Ala Pro Gly
  1                 5                  10                  15
Gly Gln Glu Ser Pro Ser Pro His Thr Ala Glu Val Glu Ser Glu Ala
             20                  25                  30
Ser Pro Pro Pro Ala Arg Pro Leu Pro Gly Glu Ala Arg Leu Ala Pro
         35                  40                  45
Ile Ser Glu Glu Gly Lys Pro Gln Leu Val Gly Arg Phe Gln Val Thr
     50                  55                  60
Ser Ser Lys Asn Arg Leu Ser Leu Phe Pro Cys Ser Gln His Pro Pro
 65                  70                  75                  80
Leu Ser Leu Val Leu Gln Asn Leu Gln Pro Leu Ser Ser Leu Gln Arg
                85                  90                  95
Ala Gln Ile Gln Arg Thr Val Pro Gly Gly Gly Pro Glu Thr Arg Glu
            100                 105                 110
Ala Leu Ala Glu Ser Asp Arg Ala Ala Glu Gly Leu Gly Ala Gly Val
        115                 120                 125
Glu Glu Glu Gly Asp Asp Gly Lys Glu Pro Gln Val Gly Gly Ser Pro
    130                 135                 140
Gln Pro Leu Ser His Pro Ser Pro Val Trp Met Asn Tyr Ser Tyr Ser
145                 150                 155                 160
Ser Leu Cys Leu Ser Ser Glu Glu Ser Glu Ser Ser Gly Glu Asp Glu
                165                 170                 175
Glu Phe Trp Ala Glu Leu Gln Ser Leu Arg Gln Lys His Leu Ser Glu
            180                 185                 190
Val Glu Thr Leu Gln Thr Leu Gln Lys Lys Glu Ile Glu Asp Leu Tyr
        195                 200                 205
Ser Arg Leu Gly Lys Gln Pro Pro Pro Gly Ile Val Ala Pro Ala Ala
    210                 215                 220
Met Leu Ser Ser Arg Gln Arg Arg Leu Ser Lys Gly Ser Phe Pro Thr
225                 230                 235                 240
Ser Arg Arg Asn Ser Leu Gln Arg Ser Glu Pro Pro Gly Pro Gly Glu
                245                 250                 255
Thr Ala Gly His Pro Ala Ser Ile Phe Ser Leu Arg Pro Leu Ser Val
            260                 265                 270
Asp Cys Phe Ser Pro Gly Pro Gly Gly Leu Pro Arg Gly Asn Arg Pro
        275                 280                 285
```

```
Pro Leu Pro Thr Ser Pro Phe Leu Thr Xaa Cys Ser Pro Ser Pro His
    290                 295                 300
Thr Ala Glu Val Glu Ser Glu Ala Ser Pro Pro Pro Ala Arg Pro Leu
305                 310                 315                 320
Pro Gly Glu Ala Arg Leu Ala Pro Ile Ser Glu Glu Gly Lys Pro Gln
                325                 330                 335
Leu Val Gly Arg Phe Pro Ser Asp Phe Ile Gln Gly Thr Gly
            340                 345                 350
```

<210> 878
<211> 112
<212>Amino acid
<213> Homo sapiens

<400> 878

```
Arg Arg Phe Val Ser Gln Glu Thr Gly Asn Leu Tyr Ile Ala Lys Val
  1               5                  10                  15
Glu Lys Ser Asp Val Gly Asn Tyr Thr Cys Val Val Thr Asn Thr Val
            20                  25                  30
Thr Asn His Lys Val Leu Gly Pro Pro Thr Pro Leu Ile Leu Arg Asn
        35                  40                  45
Asp Gly Val Met Gly Glu Tyr Glu Pro Lys Ile Glu Val Gln Phe Pro
    50                  55                  60
Glu Thr Val Pro Thr Ala Lys Gly Ala Thr Val Lys Leu Glu Cys Phe
65                  70                  75                  80
Ala Leu Gly Asn Pro Val Pro Thr Ile Ile Trp Arg Arg Ala Asp Gly
                85                  90                  95
Lys Pro Ile Ala Arg Lys Ala Arg Arg His Lys Ser Arg Val Gly Lys
            100                 105                 110     112
```

<210> 879
<211> 282
<212>Amino acid
<213> Homo sapiens

<400> 879

```
Met Leu Arg Thr Cys Tyr Val Leu Cys Ser Gln Ala Gly Pro Arg Ser
  1               5                  10                  15
Arg Gly Trp Gln Ser Leu Ser Phe Asp Gly Gly Ala Phe His Leu Lys
            20                  25                  30
Gly Thr Gly Glu Leu Thr Arg Ala Leu Leu Val Leu Arg Leu Cys Ala
        35                  40                  45
Trp Pro Pro Leu Val Thr His Gly Leu Leu Leu Gln Ala Trp Ser Arg
    50                  55                  60
Arg Leu Leu Gly Ser Arg Leu Ser Gly Ala Phe Leu Arg Ala Ser Val
65                  70                  75                  80
Tyr Gly Gln Phe Val Ala Gly Glu Thr Ala Glu Glu Val Lys Gly Cys
                85                  90                  95
Val Gln Gln Leu Arg Thr Leu Ser Leu Arg Pro Leu Leu Ala Val Pro
            100                 105                 110
Thr Glu Glu Glu Pro Asp Ser Ala Ala Lys Ser Gly Glu Ala Trp Tyr
        115                 120                 125
```

```
Glu Gly Asn Leu Gly Ala Met Leu Arg Cys Val Asp Leu Ser Arg Gly
    130                 135                 140
Leu Leu Glu Pro Pro Ser Leu Ala Glu Ala Ser Leu Met Gln Leu Lys
145                 150                 155                 160
Val Thr Ala Leu Thr Ser Thr Arg Leu Cys Lys Glu Leu Ala Ser Trp
                165                 170                 175
Val Arg Arg Pro Gly Ala Ser Leu Glu Leu Ser Pro Glu Arg Leu Ala
            180                 185                 190
Glu Ala Met Asp Ser Gly Gln Asn Leu Gln Val Ser Cys Leu Asn Ala
        195                 200                 205
Glu Gln Asn Gln His Leu Arg Ala Ser Leu Ser Arg Leu His Arg Val
    210                 215                 220
Ala Gln Tyr Ala Arg Ala Gln His Val Arg Leu Leu Val Asp Ala Glu
225                 230                 235                 240
Tyr Thr Ser Leu Asn Pro Ala Leu Ser Leu Leu Val Ala Ala Leu Ala
                245                 250                 255
Val Arg Trp Asn Ser Pro Gly Glu Gly Gly Pro Trp Val Trp Asn Thr
            260                 265                 270
Tyr Gln Ala Cys Leu Lys Asp Thr Phe  *
        275                 280 281
```

<210> 880
<211> 29
<212>Amino acid
<213> Homo sapiens

<400> 880

```
Pro His His Arg Ile Ala Gly Asp Thr Ala Ile Asp Lys Asn Ile His
  1               5                  10                  15
Gln Ser Val Ser Glu Gln Ile Lys Lys Asn Phe Ala Lys
             20                  25              29
```

<210> 881
<211> 45
<212>Amino acid
<213> Homo sapiens

<400> 881

```
Gln Met Thr Asn Pro Phe Phe Leu Cys Phe Thr Thr Met Ile Ser Asn
  1               5                  10                  15
Cys Asn Phe Phe Lys Gly Pro Pro Gly Pro Pro Gly Glu Lys Gly Asp
             20                  25                  30
Arg Gly Pro Thr Gly Glu Ser Gly Pro Arg Gly Phe Pro
         35                  40                  45
```

<210> 882
<211> 54
<212>Amino acid
<213> Homo sapiens

<400> 882

```
Asn Gly Ile Ile Ala Ser Phe Phe Leu Arg Thr Phe Ile Phe Cys Phe
 1               5                  10                  15
Ile His Ile Gln Gly Cys Gln Ala Gly Gln Thr Ile Lys Val Gln Val
            20                  25                  30
Ser Phe Asp Leu Leu Ser Leu Met Phe Thr Phe Val Ser Pro Cys Thr
        35                  40                  45
Asn Asp Leu Ile Ile His
    50                  54
```

<210> 883
<211> 479
<212>Amino acid
<213> Homo sapiens

<400> 883

```
Lys Leu Ser Val Asn His Arg Arg Thr His Leu Thr Lys Leu Met His
 1               5                  10                  15
Thr Val Glu Gln Ala Thr Leu Arg Ile Ser Gln Ser Phe Gln Lys Thr
            20                  25                  30
Thr Glu Phe Asp Thr Asn Ser Thr Asp Ile Ala Leu Lys Val Phe Phe
        35                  40                  45
Phe Asp Ser Tyr Asn Met Lys His Ile His Pro His Met Asn Met Asp
    50                  55                  60
Gly Asp Tyr Ile Asn Ile Phe Pro Lys Arg Lys Ala Ala Tyr Asp Ser
65                  70                  75                  80
Asn Gly Asn Val Ala Val Ala Phe Leu Tyr Tyr Lys Ser Ile Gly Pro
                85                  90                  95
Leu Leu Ser Ser Ser Asp Asn Phe Leu Leu Lys Pro Gln Asn Tyr Asp
            100                 105                 110
Asn Ser Glu Glu Glu Glu Arg Val Ile Ser Ser Val Ile Ser Val Ser
        115                 120                 125
Met Ser Ser Asn Pro Pro Thr Leu Tyr Glu Leu Glu Lys Ile Thr Phe
    130                 135                 140
Thr Leu Ser His Arg Lys Val Thr Asp Arg Tyr Arg Ser Leu Cys Ala
145                 150                 155                 160
Phe Trp Asn Tyr Ser Pro Asp Thr Met Asn Gly Ser Trp Ser Ser Glu
                165                 170                 175
Gly Cys Glu Leu Thr Tyr Ser Asn Glu Thr His Thr Ser Cys Arg Cys
            180                 185                 190
Asn His Leu Thr His Phe Ala Ile Leu Met Ser Ser Gly Pro Ser Ile
        195                 200                 205
Gly Ile Lys Asp Tyr Asn Ile Leu Thr Arg Ile Thr Gln Leu Gly Ile
    210                 215                 220
Ile Ile Ser Leu Ile Cys Leu Ala Ile Cys Ile Phe Thr Phe Trp Phe
225                 230                 235                 240
Phe Ser Glu Ile Gln Ser Thr Arg Thr Thr Ile His Lys Asn Leu Cys
                245                 250                 255
Cys Ser Leu Phe Leu Ala Glu Leu Val Phe Leu Val Gly Ile Asn Thr
            260                 265                 270
Asn Thr Asn Lys Leu Phe Cys Ser Ile Ile Ala Gly Leu Leu His Tyr
        275                 280                 285
Phe Phe Leu Ala Ala Phe Ala Trp Met Cys Ile Glu Gly Ile His Leu
    290                 295                 300
Tyr Leu Ile Val Val Gly Val Ile Tyr Asn Lys Gly Phe Leu His Lys
305                 310                 315                 320
Asn Phe Tyr Ile Phe Gly Tyr Leu Ser Pro Ala Val Val Val Gly Phe
                325                 330                 335
```

```
Ser Ala Ala Leu Gly Tyr Arg Tyr Tyr Gly Thr Thr Lys Val Cys Trp
            340                 345                 350
Leu Ser Thr Glu Asn Asn Phe Ile Trp Ser Phe Ile Gly Pro Ala Cys
        355                 360                 365
Leu Ile Ile Leu Val Asn Leu Leu Ala Phe Gly Val Ile Ile Tyr Lys
    370                 375                 380
Val Phe Arg His Thr Ala Gly Leu Lys Pro Glu Val Ser Cys Phe Glu
385                 390                 395                 400
Asn Ile Arg Ser Cys Ala Arg Gly Ala Leu Ala Leu Leu Phe Leu Leu
                405                 410                 415
Gly Thr Thr Trp Ile Phe Gly Val Leu His Val Val His Ala Ser Val
            420                 425                 430
Val Thr Ala Tyr Leu Phe Thr Val Ser Asn Ala Phe Gln Gly Met Phe
        435                 440                 445
Ile Phe Leu Phe Leu Cys Val Leu Ser Arg Lys Ile Gln Glu Glu Tyr
    450                 455                 460
Tyr Arg Leu Phe Lys Asn Val Pro Cys Cys Phe Gly Cys Leu Arg
465                 470                 475                 479
```

<210> 884
<211> 143
<212>Amino acid
<213> Homo sapiens

<400> 884

```
Gly Thr Arg Glu Ala Ala Pro Ser Arg Phe Met Phe Leu Leu Phe Leu
  1                 5                  10                  15
Leu Thr Cys Glu Leu Ala Ala Glu Val Ala Ala Glu Val Glu Lys Ser
             20                  25                  30
Ser Asp Gly Pro Gly Ala Ala Gln Glu Pro Thr Trp Leu Thr Asp Val
         35                  40                  45
Pro Ala Ala Met Glu Phe Ile Ala Ala Thr Glu Val Ala Val Ile Gly
     50                  55                  60
Phe Phe Gln Asp Leu Glu Ile Pro Ala Val Pro Ile Leu His Ser Met
 65                  70                  75                  80
Val Gln Lys Phe Pro Gly Val Ser Phe Gly Ile Ser Thr Asp Ser Glu
                 85                  90                  95
Val Leu Thr His Tyr Asn Ile Thr Gly Asn Thr Ile Cys Leu Phe Arg
            100                 105                 110
Leu Val Asp Asn Glu Gln Leu Asn Leu Glu Asp Glu Asp Ile Glu Ser
        115                 120                 125
Ile Asp Ala Thr Lys Leu Ser Arg Phe Ile Glu Ile Asn Ser Leu
    130                 135                 140         143
```

<210> 885
<211> 52
<212>Amino acid
<213> Homo sapiens

<400> 885

```
Asp Glu Thr Ser Gly Leu Ile Val Arg Glu Val Ser Ile Glu Ile Ser
  1                 5                  10                  15
Arg Gln Gln Val Glu Glu Leu Phe Gly Pro Glu Asp Tyr Trp Cys Gln
             20                  25                  30
```

```
Cys Val Ala Trp Ser Ser Ala Gly Thr Thr Lys Ser Arg Lys Ala Tyr
         35                  40                  45
Val Arg Ile Ala
     50      52
```

<210> 886
<211> 40
<212>Amino acid
<213> Homo sapiens

<400> 886

```
Gly Thr Arg Ser Ile His Val Lys Leu Asp Val Gly Lys Leu His Thr
  1               5                  10                  15
Gln Pro Lys Leu Ala Ala Gln Leu Arg Met Val Asp Asp Gly Ser Gly
             20                  25                  30
Lys Val Glu Gly Leu Pro Gly Ile
         35                  40
```

<210> 887
<211> 177
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(177)
<223> X = any amino acid or stop code

<400> 887

```
Xaa Cys Gly Glu Asp Gly Ser Phe Thr Gln Val Gln Cys His Thr Tyr
  1               5                  10                  15
Thr Gly Tyr Cys Trp Cys Val Thr Pro Asp Gly Lys Pro Ile Ser Gly
             20                  25                  30
Ser Ser Val Gln Asn Lys Thr Pro Val Cys Ser Gly Ser Val Thr Asp
         35                  40                  45
Lys Pro Leu Ser Gln Gly Asn Ser Gly Arg Lys Asp Asp Gly Ser Lys
     50                  55                  60
Pro Thr Pro Thr Met Glu Thr Gln Pro Val Phe Asp Gly Asp Glu Ile
 65                  70                  75                  80
Thr Ala Pro Thr Leu Trp Ile Lys His Leu Val Ile Lys Asp Ser Lys
                 85                  90                  95
Leu Asn Asn Thr Asn Ile Arg Asn Ser Glu Lys Val Tyr Ser Cys Asp
            100                 105                 110
Gln Glu Arg Gln Ser Ala Leu Glu Glu Ala Gln Gln Asn Pro Arg Glu
        115                 120                 125
Gly Ile Val Ile Pro Glu Cys Ala Pro Gly Gly Leu Tyr Lys Pro Val
    130                 135                 140
Gln Cys His Gln Ser Thr Gly Tyr Cys Trp Cys Val Leu Val Asp Thr
145                 150                 155                 160
Gly Arg Pro Leu Pro Gly Thr Ser Thr Arg Tyr Val Met Pro Ser Xaa
                165                 170                 175 176
 *
```

<210> 888
<211> 48
<212>Amino acid
<213> Homo sapiens

<400> 888

```
Val Leu Gln Leu Ile Lys Ser Gln Lys Phe Leu Asn Lys Leu Val Ile
  1               5                  10                  15
Leu Val Glu Thr Glu Lys Glu Lys Ile Leu Arg Lys Glu Tyr Val Phe
             20                  25                  30
Ala Asp Ser Lys Val Ser Asp Ser Lys Leu Leu Lys Trp Ala Val Arg
         35                  40                  45          48
```

<210> 889
<211> 316
<212>Amino acid
<213> Homo sapiens

<400> 889

```
Arg Arg Leu Ser Leu Leu Asp Leu Gln Leu Gly Pro Leu Gly Arg Asp
  1               5                  10                  15
Pro Pro Gln Glu Cys Ser Thr Phe Ser Pro Thr Asp Ser Gly Glu Glu
             20                  25                  30
Pro Gly Gln Leu Ser Pro Gly Val Gln Phe Gln Arg Arg Gln Asn Gln
         35                  40                  45
Arg Arg Phe Ser Met Glu Asp Val Ser Lys Arg Leu Ser Leu Pro Met
     50                  55                  60
Asp Ile Arg Leu Pro Gln Glu Phe Leu Gln Lys Leu Gln Met Glu Ser
 65                  70                  75                  80
Pro Asp Leu Pro Lys Pro Leu Ser Arg Met Ser Arg Arg Ala Ser Leu
                 85                  90                  95
Ser Asp Ile Gly Phe Gly Lys Leu Glu Thr Tyr Val Lys Leu Asp Lys
            100                 105                 110
Leu Gly Glu Gly Thr Tyr Ala Thr Val Phe Lys Gly Arg Ser Lys Leu
        115                 120                 125
Thr Glu Asn Leu Val Ala Leu Lys Glu Ile Arg Leu Glu His Glu Glu
    130                 135                 140
Gly Ala Pro Cys Thr Ala Ile Arg Glu Val Ser Leu Leu Lys Asn Leu
145                 150                 155                 160
Lys His Ala Asn Ile Val Thr Leu His Asp Leu Ile His Thr Asp Arg
                165                 170                 175
Ser Leu Thr Leu Val Phe Glu Tyr Leu Asp Ser Asp Leu Lys Gln Tyr
            180                 185                 190
Leu Asp His Cys Gly Asn Leu Met Ser Met His Asn Val Lys Val Arg
        195                 200                 205
Pro Arg Gly Gln Gly Pro Pro Ile Leu Ala Ala Thr Cys Pro Glu Ala
    210                 215                 220
Gln Cys Gly Asp Pro Leu Ser Pro Pro Gly Ile Arg Leu Leu Arg Trp
225                 230                 235                 240
Leu Lys Pro Ser His Val Gly Lys Arg Glu Arg Ala Met Pro Ser Thr
                245                 250                 255
Ser Pro Gly Thr Gly Leu Ser Ala Leu Pro Gln Glu Gln Thr His Thr
```

```
            260                 265                 270
Val Cys His Cys Leu Ala Val Gly Ile Lys Pro Thr Leu Asn Ser Glu
        275                 280                 285
His Gln Phe Pro Ser Leu Ser Asn Gly Ser Val Ser Tyr Leu Pro Lys
    290                 295                 300
Cys Arg Glu Ala Ser Gly Glu Ala Arg Gly Tyr Glu
305                 310                 315 316
```

<210> 890
<211> 34
<212>Amino acid
<213> Homo sapiens

<400> 890

```
His Glu Arg His Glu Pro Ser Pro Thr Ala Leu Ala Phe Gly Asp His
  1               5                  10                  15
Pro Ile Val Gln Pro Lys Gln Leu Ser Phe Lys Ile Ile Gln Val Asn
            20                  25                  30
Asp Asn
```

34

<210> 891
<211> 68
<212>Amino acid
<213> Homo sapiens

<400> 891

```
Ala Arg Gly Pro Ser Leu Leu Ser Glu Phe His Pro Gly Ser Asp Arg
  1               5                  10                  15
Pro Gln Glu Arg Arg Thr Ser Tyr Glu Pro Ile His Pro Gly Pro Ser
            20                  25                  30
Pro Val Asp His Asp Ser Leu Glu Ser Lys Arg Pro Arg Leu Glu Gln
        35                  40                  45
Ala Ser Asp Ser His Tyr Gln Gly His Ile Thr Gly Glu Ser Leu Pro
    50                  55                  60
Gly Arg Val His
 65             68
```

<210> 892
<211> 38
<212>Amino acid
<213> Homo sapiens

<400> 892

```
Gly Thr Arg Lys Glu Glu Phe Ser Ala Glu Glu Asn Phe Leu Ile Leu
  1               5                  10                  15
Thr Glu Met Ala Thr Asn His Val Gln Val Leu Val Glu Phe Thr Lys
            20                  25                  30
Lys Leu Pro Gly Ile Phe
```

35 38

<210> 893
<211> 195
<212>Amino acid
<213> Homo sapiens

<400> 893

```
His Thr His Lys Leu Val Ala Pro Arg Pro Gly Leu Pro Pro Thr Ser
  1               5                  10                  15
Gln Trp Pro Arg Asp Ala Gly Arg Gln Ala Ser Gly Gly Leu Pro Ser
            20                  25                  30
Leu Ser Thr Gly Pro Pro Lys Gly Pro Arg Asp Gly Leu Ala Arg Gly
        35                  40                  45
His Pro Ala Glu Trp Leu Ala Gly Ser Pro Gly Asn Asn Ser Pro Thr
    50                  55                  60
Gln Gly Ser Leu Pro Pro Gln Leu Asp Leu Tyr Ala Gly Ala Leu Phe
65                  70                  75                  80
Val His Ile Cys Leu Gly Trp Asn Phe Tyr Leu Ser Thr Ile Leu Thr
                85                  90                  95
Leu Gly Ile Thr Ala Leu Tyr Thr Ile Ala Gly Met Val Pro Ala Ala
            100                 105                 110
Gly Arg Ser Thr Gln Gly Thr Cys Lys Gly Val Arg Arg Pro Pro Pro
        115                 120                 125
Pro Thr Gly Pro Arg Glu Gln Pro Arg Lys Trp Pro Gln Gln Glu Pro
    130                 135                 140
Gln Lys Phe Leu Pro Val Ser Leu Leu Pro Gly Ala Arg Ala Pro Ser
145                 150                 155                 160
Ser Asn Leu Ala Ser Thr Gly Arg Gly Pro Gly Cys Cys Asn Leu His
                165                 170                 175
Gly Arg Pro Ala Asp Ala His His Gly Gly Gly Gly Cys His Pro Asp
            180                 185                 190
Asn Gln Arg
        195
```

<210> 894
<211> 87
<212>Amino acid
<213> Homo sapiens

<400> 894

```
Met Val Asn His Ser Leu Gln Glu Thr Ser Glu Gln Asn Val Ile Leu
  1               5                  10                  15
Gln His Thr Leu Gln Gln Gln Gln Gln Met Leu Gln Gln Glu Thr Ile
            20                  25                  30
Arg Asn Gly Glu Leu Glu Asp Thr Gln Thr Lys Leu Glu Lys Gln Val
        35                  40                  45
Ser Lys Leu Glu Gln Glu Leu Gln Lys Gln Arg Glu Ser Ser Ala Glu
    50                  55                  60
Lys Leu Arg Lys Met Glu Glu Lys Cys Glu Ser Ala Ala His Glu Ala
65                  70                  75                  80
Asp Leu Lys Arg Gln Lys  *
                85  86
```

<210> 895
<211> 49
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(49)
<223> X = any amino acid or stop code

<400> 895

```
Val Cys Pro Lys Trp Cys Arg Phe Leu Thr Met Leu Gly His Cys Cys
  1               5                  10                  15
Tyr Phe Trp His Val Trp Pro Ala Ser Xaa Ala Leu Ser Ala Gly Pro
            20                  25                  30
Thr Pro Thr Ser Arg Ser Phe Ser Pro Ser Pro Leu Arg Ser Ile Ser
        35                  40                  45
Thr
 49
```

<210> 896
<211> 128
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(128)
<223> X = any amino acid or stop code

<400> 896

```
Met Arg Gly Pro Pro Val Leu Leu Leu Gln Ala Ala Pro Met Glu Cys
  1               5                  10                  15
Pro Val Pro Gln Gly Ile Pro Ala Gly Ser Ser Pro Glu Pro Ala Pro
            20                  25                  30
Asp Pro Pro Gly Pro His Phe Leu Arg Gln Glu Arg Ser Phe Glu Cys
        35                  40                  45
Arg Met Cys Gly Lys Ala Phe Lys Arg Ser Ser Thr Leu Ser Thr His
    50                  55                  60
Leu Leu Ile His Ser Asp Thr Arg Pro Tyr Pro Cys Gln Phe Cys Gly
65                  70                  75                  80
Lys Arg Phe His Gln Lys Ser Asp Met Lys Lys His Thr Tyr Ile His
                85                  90                  95
Thr Gly Glu Lys Pro His Lys Cys Gln Thr Gln Arg Glu Pro Thr Met
            100                 105                 110
Val Leu Ser Pro Ala Asp Lys Thr Asn Val Lys Ala Ala Trp Xaa  *
        115                 120                 125     127
```

<210> 897
<211> 57
<212>Amino acid
<213> Homo sapiens

<400> 897
His Glu Gln Leu Thr Asn Asn Thr Ala Thr Ala Pro Ser Ala Thr Pro
1 5 10 15
Val Phe Gly Gln Val Ala Ala Ser Thr Ala Pro Ser Leu Phe Gly Gln
20 25 30
Gln Thr Gly Ile Thr Ala Ser Thr Ala Val Ala Thr Pro Gln Val Ile
35 40 45
Ser Ser Arg Phe Ile Asn Leu Asp Phe
50 55 57

<210> 898
<211> 163
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(163)
<223> X = any amino acid or stop code

<400> 898
Val Ser Val Phe Lys Asn Cys Pro Met Tyr Xaa Ile Cys Ile Phe Leu
1 5 10 15
Thr Lys Met Phe Cys Val Leu Ile Ile Xaa Asn Lys Phe Xaa Val His
20 25 30
Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr His Gly Ala
35 40 45
Leu Gln Gly Leu Ala Tyr Leu His Ser His Thr Met Ile His Arg Asp
50 55 60
Ile Lys Ala Gly Asn Ile Leu Leu Thr Glu Pro Gly Gln Val Lys Leu
65 70 75 80
Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn Ser Phe Val
85 90 95
Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala Met Asp Glu
100 105 110
Gly Gln Tyr Asp Gly Lys Val Asp Val Trp Ser Leu Gly Ile Thr Cys
115 120 125
Ile Glu Leu Ala Glu Arg Lys Pro Pro Leu Phe Asn Met Asn Ala Met
130 135 140
Ser Ala Leu Tyr His Ile Ala Gln Asn Glu Ser Pro Thr Leu Gln Ser
145 150 155 160
Asn Glu Trp
163

<210> 899
<211> 352
<212>Amino acid
<213> Homo sapiens

<400> 899

```
Arg His Ala Arg Pro Gly Gly Gly Gly His Ser Asn Gln Arg Lys Met
 1               5                  10                  15
Ser Leu Glu Gln Glu Glu Glu Thr Gln Pro Gly Arg Leu Leu Gly Arg
            20                  25                  30
Arg Asp Ala Val Pro Ala Phe Ile Glu Pro Asn Val Arg Phe Trp Ile
        35                  40                  45
Thr Glu Arg Gln Ser Phe Ile Arg Arg Phe Leu Gln Trp Thr Glu Leu
    50                  55                  60
Leu Asp Pro Thr Asn Val Phe Ile Ser Val Glu Ser Ile Glu Asn Ser
65                  70                  75                  80
Arg Gln Leu Leu Cys Thr Asn Glu Asp Val Ser Ser Pro Ala Ser Ala
                85                  90                  95
Asp Gln Arg Ile Gln Glu Ala Trp Lys Arg Ser Leu Ala Thr Val His
            100                 105                 110
Pro Asp Ser Ser Asn Leu Ile Pro Lys Leu Phe Arg Pro Ala Ala Phe
        115                 120                 125
Leu Pro Phe Met Ala Pro Thr Val Phe Leu Ser Met Thr Pro Leu Lys
    130                 135                 140
Gly Ile Lys Ser Val Ile Leu Pro Gln Val Phe Leu Cys Ala Tyr Met
145                 150                 155                 160
Ala Ala Phe Asn Ser Ile Asn Gly Asn Arg Ser Tyr Thr Cys Lys Pro
                165                 170                 175
Leu Glu Arg Ser Leu Leu Met Ala Gly Ala Val Ala Ser Ser Thr Phe
            180                 185                 190
Leu Gly Val Ile Pro Gln Phe Val Gln Met Lys Tyr Gly Leu Thr Gly
        195                 200                 205
Pro Trp Ile Lys Arg Leu Leu Pro Val Ile Phe Leu Val Gln Ala Ser
    210                 215                 220
Gly Met Asn Val Tyr Met Ser Arg Ser Leu Glu Ser Ile Lys Gly Ile
225                 230                 235                 240
Ala Val Met Asp Lys Glu Gly Asn Val Leu Gly His Ser Arg Ile Ala
                245                 250                 255
Gly Thr Lys Ala Val Arg Glu Thr Leu Ala Ser Arg Ile Val Leu Phe
            260                 265                 270
Gly Thr Ser Ala Leu Ile Pro Glu Val Phe Thr Tyr Phe Phe Lys Arg
        275                 280                 285
Thr Gln Tyr Phe Arg Lys Asn Pro Gly Ser Leu Trp Ile Leu Lys Leu
    290                 295                 300
Ser Cys Thr Val Leu Ala Met Gly Leu Met Val Pro Phe Ser Phe Ser
305                 310                 315                 320
Ile Phe Pro Gln Ile Gly Gln Ile Gln Tyr Cys Ser Leu Glu Glu Lys
                325                 330                 335
Ile Gln Ser Pro Thr Glu Glu Thr Glu Ile Phe Tyr His Arg Gly Val
            340                 345                 350     352
```

<210> 900
<211> 186
<212>Amino acid
<213> Homo sapiens

<400> 900

```
His Ala Ser Gly Arg Leu Glu Val Phe Tyr Asn Gly Thr Trp Gly Ser
 1               5                  10                  15
Val Gly Arg Arg Asn Ile Thr Thr Ala Ile Ala Gly Ile Val Cys Arg
            20                  25                  30
Gln Leu Gly Cys Gly Glu Asn Gly Val Val Ser Leu Ala Pro Leu Ser
        35                  40                  45
```

```
Lys Thr Gly Ser Gly Phe Met Trp Val Asp Asp Ile Gln Cys Pro Lys
     50                  55                  60
Thr His Ile Ser Ile Trp Gln Cys Leu Ser Ala Pro Trp Glu Arg Arg
 65                  70                  75                  80
Ile Ser Ser Pro Ala Glu Glu Thr Trp Ile Thr Cys Glu Asp Arg Ile
                 85                  90                  95
Arg Val Arg Gly Gly Asp Thr Glu Cys Ser Gly Arg Val Glu Ile Trp
            100                 105                 110
His Ala Gly Ser Trp Gly Thr Val Cys Asp Asp Ser Trp Asp Leu Ala
        115                 120                 125
Glu Ala Glu Val Val Cys Gln Gln Leu Gly Cys Gly Ser Ala Leu Ala
    130                 135                 140
Ala Leu Arg Asp Ala Ser Phe Gly Gln Gly Thr Gly Thr Ile Trp Leu
145                 150                 155                 160
Asp Asp Met Arg Cys Lys Gly Asn Glu Ser Phe Leu Trp Asp Cys His
                165                 170                 175
Ala Lys Pro Trp Gly Gln Ser Asp Cys Gly
            180                 185 186
```

<210> 901
<211> 365
<212>Amino acid
<213> Homo sapiens

<400> 901

```
Leu Gly Asp Phe Pro Gln Pro Gln Arg Gln Arg Arg Pro Gly Ala Ser
  1               5                  10                  15
Asp Leu Pro Pro His Leu Ala Gly Ala Arg Gln Trp Glu Val Arg Phe
             20                  25                  30
Phe Arg His Leu Pro Ala Arg Thr Leu Pro Pro Ser Leu Arg Met Pro
         35                  40                  45
Glu Gly Pro Glu Leu His Leu Ala Ser Gln Phe Val Asn Glu Ala Cys
     50                  55                  60
Arg Ala Leu Val Phe Gly Gly Cys Val Glu Lys Ser Ser Val Ser Arg
 65                  70                  75                  80
Asn Pro Glu Val Pro Phe Glu Ser Ser Ala Tyr Arg Ile Ser Ala Ser
                 85                  90                  95
Ala Arg Gly Lys Glu Leu Arg Leu Ile Leu Ser Pro Leu Pro Gly Ala
            100                 105                 110
Gln Pro Gln Gln Glu Pro Leu Ala Leu Val Phe Arg Phe Gly Met Ser
        115                 120                 125
Gly Ser Phe Gln Leu Val Pro Arg Glu Glu Leu Pro Arg His Ala His
    130                 135                 140
Leu Arg Phe Tyr Thr Ala Pro Pro Gly Pro Arg Leu Ala Leu Cys Phe
145                 150                 155                 160
Val Asp Ile Arg Arg Phe Gly Arg Trp Asp Leu Gly Gly Lys Trp Gln
                165                 170                 175
Pro Gly Arg Gly Pro Cys Val Leu Gln Glu Tyr Gln Gln Phe Arg Glu
            180                 185                 190
Asn Val Leu Arg Asn Leu Ala Asp Lys Ala Phe Asp Arg Pro Ile Cys
        195                 200                 205
Glu Ala Leu Leu Asp Gln Arg Phe Phe Asn Gly Ile Gly Asn Tyr Leu
    210                 215                 220
Arg Ala Glu Ile Leu Tyr Arg Leu Lys Ile Pro Pro Phe Glu Lys Ala
225                 230                 235                 240
Arg Ser Val Leu Glu Ala Leu Gln Gln His Arg Pro Ser Pro Glu Leu
                245                 250                 255
Thr Leu Ser Gln Lys Ile Arg Thr Lys Leu Gln Asn Pro Asp Leu Leu
            260                 265                 270
```

```
Glu Leu Cys His Ser Val Pro Lys Glu Val Val Gln Leu Gly Gly Arg
        275                 280                 285
Gly Tyr Gly Ser Glu Ser Gly Glu Glu Asp Phe Ala Ala Phe Arg Ala
    290                 295                 300
Trp Leu Arg Cys Tyr Gly Met Pro Gly Met Ser Ser Leu Gln Asp Arg
305                 310                 315                 320
His Gly Arg Thr Ile Trp Phe Gln Gly Asp Pro Gly Pro Leu Ala Pro
                325                 330                 335
Lys Gly Arg Lys Ser Arg Lys Lys Lys Ser Lys Ala Thr Gln Leu Ser
            340                 345                 350
Pro Glu Asp Arg Val Glu Asp Ala Leu Pro Pro Ser Lys
        355                 360                 365
```

<210> 902
<211> 110
<212>Amino acid
<213> Homo sapiens

<400> 902

```
Leu Thr Trp Ser Ala Cys Tyr Trp Arg Asp Ile Leu Arg Ile Gln Leu
  1               5                  10                  15
Trp Ile Ala Ala Asp Ile Leu Leu Arg Met Leu Glu Lys Ala Leu Leu
             20                  25                  30
Tyr Ser Glu His Gln Asn Ile Ser Asn Thr Gly Leu Ser Ser Gln Gly
         35                  40                  45
Leu Leu Ile Phe Ala Glu Leu Ile Pro Ala Ile Lys Arg Thr Leu Ala
     50                  55                  60
Arg Leu Leu Val Ile Ile Ala Ser Leu Asp Tyr Gly Ile Glu Lys Pro
 65                  70                  75                  80
His Leu Gly Thr Gly Met His Arg Val Ile Gly Leu Met Leu Leu Tyr
                 85                  90                  95
Leu Ile Phe Ala Asn Ala Glu Ser Val Ile Arg Val Ile Gly
            100                 105                 110
```

<210> 903
<211> 44
<212>Amino acid
<213> Homo sapiens

<400> 903

```
Phe Phe Phe Glu Met Glu Ser Arg Ser Ala Ala Gln Ala Gly Val Gln
  1               5                  10                  15
Trp Cys Asn Leu Gly Ser Leu Gln Ala Leu Pro Pro Arg Phe Thr Pro
             20                  25                  30
Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr
         35                  40                  44
```

<210> 904
<211> 190
<212>Amino acid
<213> Homo sapiens

<400> 904

```
Tyr Glu Cys Glu Glu Leu Ala Lys Lys Leu Glu Asn Ser Gln Arg Asp
 1               5                  10                  15
Gly Ile Ser Arg Asn Lys Leu Ala Leu Ala Glu Leu Tyr Glu Asp Glu
            20                  25                  30
Val Lys Cys Lys Ser Ser Lys Ser Asn Arg Pro Lys Ala Thr Val Phe
        35                  40                  45
Lys Ser Pro Arg Thr Pro Pro Gln Arg Phe Tyr Ser Ser Glu His Glu
    50                  55                  60
Tyr Ser Gly Leu Asn Ile Val Arg Pro Ser Thr Gly Lys Ile Val Asn
65                  70                  75                  80
Glu Leu Phe Lys Glu Ala Arg Glu His Gly Ala Val Pro Leu Asn Glu
                85                  90                  95
Ala Thr Arg Ala Ser Gly Asp Asp Lys Ser Lys Ser Phe Thr Gly Gly
            100                 105                 110
Gly Tyr Arg Leu Gly Ser Ser Phe Cys Lys Arg Ser Glu Tyr Ile Tyr
        115                 120                 125
Gly Glu Asn Gln Leu Gln Asp Val Gln Ile Leu Leu Lys Leu Trp Ser
    130                 135                 140
Asn Gly Phe Ser Leu Asp Asp Gly Glu Leu Arg Pro Tyr Asn Glu Pro
145                 150                 155                 160
Thr Asn Ala Gln Phe Leu Glu Ser Val Lys Arg Gly Val Thr Leu Ile
                165                 170                 175
Ala Cys Met Pro Glu Ile Gln Gln Leu Met Leu Glu Ile Phe
            180                 185                 190
```

<210> 905
<211> 414
<212>Amino acid
<213> Homo sapiens

<400> 905

```
Trp Pro Cys Gly Ala Ala Pro Gly Leu Thr His Ala Ser Glu Arg Met
 1               5                  10                  15
Phe Thr Leu Thr Thr Met Ile Gln Ala Leu Ala Pro Val Met Gly Trp
            20                  25                  30
Asp Arg Lys Pro Leu Lys Met Phe Ser Ser Glu Glu Met Arg Gly His
        35                  40                  45
Leu His His His His Lys Cys Leu Thr Lys Ile Leu Lys Val Glu Gly
    50                  55                  60
Gln Val Pro Asp Leu Pro Ser Cys Leu Pro Leu Thr Asp Asn Thr Arg
65                  70                  75                  80
Met Leu Ala Ser Ile Leu Ile Asn Met Leu Tyr Asp Asp Leu Arg Cys
                85                  90                  95
Asp Pro Glu Arg Asp His Phe Arg Lys Ile Cys Glu Glu Tyr Ile Thr
            100                 105                 110
Gly Lys Phe Asp Pro Gln Asp Met Asp Lys Asn Leu Asn Ala Ile Gln
        115                 120                 125
Thr Val Ser Gly Ile Leu Gln Gly Pro Phe Asp Leu Gly Asn Gln Leu
    130                 135                 140
Leu Gly Leu Lys Gly Val Met Glu Met Met Val Ala Leu Cys Gly Ser
145                 150                 155                 160
Glu Arg Glu Thr Asp Gln Leu Val Ala Val Glu Ala Leu Ile His Ala
                165                 170                 175
Ser Thr Lys Leu Ser Arg Ala Thr Phe Ile Ile Thr Asn Gly Val Ser
            180                 185                 190
```

```
Leu Leu Lys Gln Ile Tyr Lys Thr Thr Lys Asn Glu Lys Ile Lys Ile
        195                 200                 205
Arg Thr Leu Val Gly Leu Cys Lys Leu Gly Ser Ala Gly Gly Thr Asp
    210                 215                 220
Tyr Gly Leu Arg Gln Phe Ala Glu Gly Ser Thr Glu Lys Leu Ala Lys
225                 230                 235                 240
Gln Cys Arg Lys Trp Leu Cys Asn Met Ser Ile Asp Thr Arg Thr Arg
                245                 250                 255
Arg Trp Ala Val Glu Gly Leu Ala Tyr Leu Thr Leu Asp Ala Asp Val
            260                 265                 270
Lys Asp Asp Phe Val Gln Asp Val Pro Ala Leu Gln Ala Met Phe Glu
        275                 280                 285
Leu Ala Lys Thr Ser Asp Lys Thr Ile Leu Tyr Ser Val Ala Thr Thr
    290                 295                 300
Leu Val Asn Cys Thr Asn Ser Tyr Asp Val Lys Glu Val Ile Pro Glu
305                 310                 315                 320
Leu Val Gln Leu Ala Lys Phe Ser Lys Gln His Val Pro Glu Glu His
                325                 330                 335
Pro Lys Asp Lys Lys Asp Phe Ile Asp Met Arg Val Lys Arg Leu Leu
            340                 345                 350
Lys Ala Gly Val Ile Ser Ala Leu Ala Cys Met Val Lys Ala Asp Ser
        355                 360                 365
Ala Ile Leu Thr Asp Gln Thr Lys Glu Leu Leu Ala Arg Val Phe Leu
    370                 375                 380
Ala Leu Cys Asp Asn Pro Lys Asp Arg Gly Thr Ile Val Ala Gln Gly
385                 390                 395                 400
Gly Gly Lys Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp
                405                 410                 414
```

<210> 906
<211> 296
<212>Amino acid
<213> Homo sapiens

<400> 906

```
Val Asp Ser Val Gly Gly Gly Ser Glu Ser Arg Ser Leu Asp Ser Pro
  1               5                  10                  15
Thr Ser Ser Pro Gly Ala Gly Thr Arg Gln Leu Val Lys Ala Ser Ser
            20                  25                  30
Thr Gly Thr Glu Ser Ser Asp Asp Phe Glu Glu Arg Asp Pro Asp Leu
        35                  40                  45
Gly Asp Gly Leu Glu Asn Gly Leu Gly Ser Pro Phe Gly Lys Trp Thr
    50                  55                  60
Leu Ser Ser Ala Ala Gln Thr His Gln Leu Arg Arg Leu Arg Gly Pro
65                  70                  75                  80
Ala Lys Cys Arg Glu Cys Glu Ala Phe Met Val Ser Gly Thr Glu Cys
                85                  90                  95
Glu Glu Cys Phe Leu Thr Cys His Lys Arg Cys Leu Glu Thr Leu Leu
            100                 105                 110
Ile Leu Cys Gly His Arg Arg Leu Pro Ala Arg Thr Pro Leu Phe Gly
        115                 120                 125
Val Asp Phe Leu Gln Leu Pro Arg Asp Phe Pro Glu Glu Val Pro Phe
    130                 135                 140
Val Val Thr Lys Cys Thr Ala Glu Ile Glu His Arg Ala Leu Asp Val
145                 150                 155                 160
Gln Gly Ile Tyr Arg Val Ser Gly Ser Arg Val Arg Val Glu Arg Leu
                165                 170                 175
Cys Gln Ala Phe Glu Asn Gly Arg Ala Leu Val Glu Leu Ser Gly Asn
            180                 185                 190
```

```
Ser Pro His Asp Val Ser Ser Val Leu Lys Arg Phe Leu Gln Glu Leu
        195                 200                 205
Thr Glu Pro Val Ile Pro Phe His Leu Tyr Asp Ala Phe Ile Ser Leu
    210                 215                 220
Ala Lys Thr Leu His Ala Asp Pro Gly Asp Asp Pro Gly Thr Pro Ser
225                 230                 235                 240
Pro Ser Pro Glu Val Ile Arg Ser Leu Lys Thr Leu Leu Val Gln Leu
                245                 250                 255
Pro Asp Ser Asn Tyr Asn Thr Leu Arg His Leu Val Ala His Leu Phe
            260                 265                 270
Arg Val Ala Ala Arg Phe Met Glu Asn Lys Met Ser Ala Asn Asn Leu
        275                 280                 285
Gly Ile Val Phe Gly Pro Thr Leu
    290                 295 296
```

<210> 907
<211> 131
<212>Amino acid
<213> Homo sapiens

<400> 907

```
Gly Leu His Val Ile Ser Leu His Ser Ala Asp Gly Arg His Trp Glu
  1               5                  10                  15
Asp Pro Leu Ser Glu Leu Asp Ser Glu Arg Val Ser Ala Phe Leu Val
            20                  25                  30
Thr Glu Thr Leu Val Phe Tyr Leu Phe Cys Leu Leu Ala Asp Glu Thr
        35                  40                  45
Val Val Pro Pro Asp Val Pro Ser Tyr Leu Ser Ser Gln Gly Thr Leu
    50                  55                  60
Ser Asp Arg Gln Glu Thr Val Val Arg Thr Glu Gly Gly Pro Gln Ala
65                  70                  75                  80
Asn Gly His Ile Glu Ser Asn Gly Lys Ala Ser Val Thr Val Lys Gln
                85                  90                  95
Ser Ser Ala Val Thr Val Ser Leu Gly Ala Gly Gly Gly Leu Gln Val
            100                 105                 110
Phe Thr Gly Gln Val Pro Gly Ile Arg Trp Gly Lys Leu Gly Glu Ala
        115                 120                 125
His Ala Ser
    130 131
```

<210> 908
<211> 124
<212>Amino acid
<213> Homo sapiens

<400> 908

```
Lys Ile Lys His Arg Pro Glu Glu Glu Pro Arg Trp Ala Ala Ala Gly
  1               5                  10                  15
Ala Gln Ser Ala Gly Pro Gly Ala Ala Glu Val Ala Pro Pro Arg Pro
            20                  25                  30
Gly Thr Val Ala Pro Gly Ala Asn Gly Met Thr Asp Ser Ala Thr Ala
        35                  40                  45
Asn Gly Asp Asp Arg Asp Pro Glu Ile Glu Leu Phe Val Lys Ala Gly
    50                  55                  60
```

```
Ile Asp Gly Glu Ser Ile Gly Asn Cys Pro Phe Ser Gln Arg Leu Phe
 65                  70                  75                  80
Met Ile Leu Trp Leu Lys Gly Val Val Phe Asn Val Thr Thr Val Asp
                85                  90                  95
Leu Lys Arg Lys Pro Ala Asp Leu Arg Asn Leu Ala Pro Gly Thr His
            100                 105                 110
Pro Pro Phe Leu Ala Phe Asn Trp Tyr Val Lys Thr
        115                 120             124
```

<210> 909
<211> 111
<212>Amino acid
<213> Homo sapiens

<400> 909

```
Leu Gly Phe Ser Asp Gly Gln Glu Ala Arg Pro Glu Glu Ile Gly Trp
  1               5                  10                  15
Leu Asn Gly Tyr Asn Glu Thr Thr Gly Glu Arg Gly Asp Phe Pro Gly
            20                  25                  30
Thr Tyr Val Glu Tyr Ile Gly Arg Lys Lys Ile Ser Pro Pro Thr Pro
        35                  40                  45
Lys Pro Arg Pro Pro Arg Pro Leu Pro Val Ala Pro Gly Ser Ser Lys
    50                  55                  60
Thr Glu Ala Asp Val Glu Gln Gln Val Leu Tyr Lys Tyr Arg Lys Lys
 65                  70                  75                  80
Pro Ser Ser Ser His Arg Pro Gln Thr Pro His Asn Gly Lys Ser Lys
                85                  90                  95
Asn Phe Leu His Lys Gln Gly Leu Lys Lys Lys Lys Ala Ser Leu
            100                 105                 110 111
```

<210> 910
<211> 298
<212>Amino acid
<213> Homo sapiens

<400> 910

```
Arg Thr Arg Gly Val Met Glu Leu Ala Leu Arg Arg Ser Pro Val Pro
  1               5                  10                  15
Arg Trp Leu Leu Leu Leu Pro Leu Leu Leu Gly Leu Asn Ala Gly Ala
            20                  25                  30
Val Ile Asp Trp Pro Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val
        35                  40                  45
Thr Val Arg Lys Asp Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr
    50                  55                  60
Asn Ser Cys Lys Asn Phe Ser Glu Leu Pro Leu Val Met Trp Leu Gln
 65                  70                  75                  80
Gly Gly Pro Gly Gly Ser Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile
                85                  90                  95
Gly Pro Leu Asp Ser Asp Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln
            100                 105                 110
Ala Ala Ser Leu Leu Phe Val Asp Asn Pro Val Gly Thr Gly Phe Ser
        115                 120                 125
Tyr Val Asn Gly Ser Gly Ala Tyr Ala Lys Asp Leu Ala Met Val Ala
    130                 135                 140
```

```
Ser Asp Met Met Gly Leu Leu Lys Thr Phe Phe Ser Cys His Lys Glu
145                 150                 155                 160
Phe Gln Thr Val Pro Phe Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys
                165                 170                 175
Met Ala Ala Gly Ile Gly Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly
            180                 185                 190
Thr Ile Lys Cys Asn Phe Ala Gly Val Ala Leu Gly Asp Ser Trp Ile
        195                 200                 205
Ser Pro Val Asp Ser Val Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met
    210                 215                 220
Ser Leu Leu Glu Asp Lys Gly Leu Ala Glu Val Ser Lys Val Ala Glu
225                 230                 235                 240
Gln Val Leu Asn Ala Val Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu
                245                 250                 255
Leu Trp Gly Lys Ala Glu Met Ile Ile Glu Gln Val Lys Arg Gly Asn
            260                 265                 270
Thr Gln Arg Arg Ala Cys Leu Ala Phe Ser Gly Gly Tyr Arg Ala His
        275                 280                 285
Gly Trp Cys Cys Gln Thr Trp Ser Leu His
    290                 295         298
```

<210> 911
<211> 213
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(213)
<223> X = any amino acid or stop code

<400> 911

```
Pro Gly Trp Ser Arg Ser Pro Asp Leu Val Ile Arg Leu Pro Arg Pro
  1               5                  10                  15
Pro Lys Val Leu Gly Leu Gln Tyr Tyr His Phe Phe Phe Phe Leu Arg
            20                  25                  30
Trp Ser Leu Asp Ser Val Ala Gln Ala Glu Val Gln Trp His Asp Leu
        35                  40                  45
Arg Ser Leu Gln Ala Pro Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu
    50                  55                  60
Ser Leu Pro Gly Ser Trp Asp Tyr Arg Cys Pro Pro Pro Arg Pro Ala
65                  70                  75                  80
Asn Phe Leu Tyr Phe Xaa Xaa Arg Arg Gly Phe Thr Val Leu Ala Arg
                85                  90                  95
Met Val Ser Ile Ser Xaa Pro Arg Asp Pro Pro Ala Ser Ala Ser Gln
            100                 105                 110
Ser Ala Gly Ile Thr Val Leu Ser Leu Phe Phe Phe Phe Glu Met Glu
        115                 120                 125
Ser Cys Ser Val Ala Gln Ala Gly Val Gln Trp Arg Tyr Leu Gly Ser
    130                 135                 140
Leu Gln Ala Leu Pro Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu
145                 150                 155                 160
Pro Ser Ser Trp Asp Tyr Arg Arg Pro Pro Pro Arg Pro Ala Asn Phe
                165                 170                 175
Phe Val Phe Leu Val Glu Thr Gly Val Ser Pro Cys Xaa Pro Gly Trp
            180                 185                 190
Ser Arg Ser Pro Asp Leu Val Ile Arg Leu Pro Gln Pro Pro Lys Val
        195                 200                 205
Leu Gly Leu Gln Val
```

210 213

<210> 912
<211> 583
<212>Amino acid
<213> Homo sapiens

<400> 912

```
Pro Ser Met Lys Thr Gly Glu Leu Glu Lys Glu Thr Ala Pro Leu Arg
 1               5                  10                  15
Lys Asp Ala Asp Ser Ser Ile Ser Val Leu Glu Ile His Ser Gln Lys
            20                  25                  30
Ala Gln Ile Glu Glu Pro Asp Pro Pro Glu Met Glu Thr Ser Leu Asp
        35                  40                  45
Ser Ser Glu Met Ala Lys Asp Leu Ser Ser Lys Thr Ala Leu Ser Ser
    50                  55                  60
Thr Glu Ser Cys Thr Met Lys Gly Glu Glu Lys Ser Pro Lys Thr Lys
65                  70                  75                  80
Lys Asp Lys Arg Pro Pro Ile Leu Glu Cys Leu Glu Lys Leu Glu Lys
                85                  90                  95
Ser Lys Lys Thr Phe Leu Asp Lys Asp Ala Gln Arg Leu Ser Pro Ile
            100                 105                 110
Pro Glu Glu Val Pro Lys Ser Thr Leu Glu Ser Glu Lys Pro Gly Ser
        115                 120                 125
Pro Glu Ala Ala Glu Thr Ser Pro Pro Ser Asn Ile Ile Asp His Cys
    130                 135                 140
Glu Lys Leu Ala Ser Glu Lys Glu Val Val Glu Cys Gln Ser Thr Ser
145                 150                 155                 160
Thr Val Gly Gly Gln Ser Val Lys Lys Val Asp Leu Glu Thr Leu Lys
                165                 170                 175
Glu Asp Ser Glu Phe Thr Lys Val Glu Met Asp Asn Leu Asp Asn Ala
            180                 185                 190
Gln Thr Ser Gly Ile Glu Glu Pro Ser Glu Thr Lys Gly Ser Met Gln
        195                 200                 205
Lys Ser Lys Phe Lys Tyr Lys Leu Val Pro Glu Glu Glu Thr Thr Ala
    210                 215                 220
Ser Glu Asn Thr Glu Ile Thr Ser Glu Arg Gln Lys Glu Gly Ile Lys
225                 230                 235                 240
Leu Thr Ile Arg Ile Ser Ser Arg Lys Lys Lys Pro Asp Ser Pro Pro
                245                 250                 255
Lys Val Leu Glu Pro Glu Asn Lys Gln Glu Lys Thr Glu Lys Glu Glu
            260                 265                 270
Glu Lys Thr Asn Val Gly Arg Thr Leu Arg Arg Ser Pro Arg Ile Ser
        275                 280                 285
Arg Pro Thr Ala Lys Val Ala Glu Ile Arg Asp Gln Lys Ala Asp Lys
    290                 295                 300
Lys Arg Gly Glu Gly Glu Asp Glu Val Glu Glu Glu Ser Thr Ala Leu
305                 310                 315                 320
Gln Lys Thr Asp Lys Lys Glu Ile Leu Lys Lys Ser Glu Lys Asp Thr
                325                 330                 335
Asn Ser Lys Val Ser Lys Val Lys Pro Lys Gly Lys Val Arg Trp Thr
            340                 345                 350
Gly Ser Arg Thr Arg Gly Arg Trp Lys Tyr Ser Ser Asn Asp Glu Ser
        355                 360                 365
Glu Gly Ser Gly Ser Glu Lys Ser Ser Ala Ala Ser Glu Glu Glu Glu
    370                 375                 380
Glu Lys Glu Ser Glu Glu Ala Ile Leu Ala Asp Asp Asp Glu Pro Cys
385                 390                 395                 400
Lys Lys Cys Gly Leu Pro Asn His Pro Glu Leu Ile Leu Leu Cys Asp
```

```
                405                 410                 415
Ser Cys Asp Ser Gly Tyr His Thr Ala Leu Pro Phe Ala Pro Pro Leu
            420                 425                 430
Met Ile His Pro Gln Met Gly Gly Trp Phe Cys Pro Thr Phe Cys Pro
        435                 440                 445
Thr Leu Asn Leu Leu Leu Leu Glu Lys Leu Glu Asp Gln Phe Gln Asp
    450                 455                 460
Leu Asp Val Ala Leu Lys Lys Glu Arg Ala Leu Pro Glu Arg Arg Lys
465                 470                 475                 480
Glu Arg Leu Val Tyr Val Gly Ile Ser Ile Glu Asn Ile Ile Pro Pro
                485                 490                 495
Gln Glu Pro Asp Phe Ser Glu Asp Gln Glu Glu Lys Lys Lys Asp Ser
            500                 505                 510
Lys Lys Ser Lys Ala Asn Leu Leu Glu Arg Arg Ser Thr Arg Thr Arg
        515                 520                 525
Lys Cys Ile Ser Tyr Arg Phe Asp Glu Phe Asp Glu Ala Ile Asp Glu
    530                 535                 540
Ala Ile Glu Asp Asp Ile Lys Glu Ala Asp Gly Gly Gly Val Gly Arg
545                 550                 555                 560
Gly Lys Asp Ile Ser Thr Ile Thr Gly His Arg Gly Lys Asp Ile Ser
                565                 570                 575
Thr Ile Leu Asp Glu Glu Arg
            580         583
```

<210> 913
<211> 178
<212>Amino acid
<213> Homo sapiens

<400> 913

```
Lys Arg Arg Gly Ser Phe Lys Met Ala Glu Leu Asp Gln Leu Pro Asp
  1               5                  10                  15
Glu Ser Ser Ser Ala Lys Ala Leu Val Ser Leu Lys Glu Gly Ser Leu
            20                  25                  30
Ser Asn Thr Trp Asn Glu Lys Tyr Ser Ser Leu Gln Lys Thr Pro Val
        35                  40                  45
Trp Lys Gly Arg Asn Thr Ser Ser Ala Val Glu Met Pro Phe Arg Asn
    50                  55                  60
Ser Lys Arg Ser Arg Leu Phe Ser Asp Glu Asp Asp Arg Gln Ile Asn
65                  70                  75                  80
Thr Arg Ser Pro Lys Arg Asn Gln Arg Val Ala Met Val Pro Gln Lys
                85                  90                  95
Phe Thr Ala Thr Met Ser Thr Pro Asp Lys Lys Ala Ser Gln Lys Ile
            100                 105                 110
Gly Phe Arg Leu Arg Asn Leu Leu Lys Leu Pro Lys Ala His Lys Trp
        115                 120                 125
Cys Ile Tyr Glu Trp Phe Tyr Ser Asn Ile Asp Lys Pro Leu Phe Glu
    130                 135                 140
Gly Asp Asn Asp Phe Cys Val Cys Leu Lys Glu Ser Phe Pro Asn Leu
145                 150                 155                 160
Lys Thr Arg Lys Leu Thr Arg Val Glu Trp Gly Lys Ile Arg Arg Leu
                165                 170                 175
Met Gly
    178
```

<210> 914
<211> 158
<212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(158)
<223> X = any amino acid or stop code

<400> 914

```
Met Pro Glu Tyr Leu Arg Lys Arg Phe Gly Gly Ile Arg Ile Pro Ile
  1               5                  10                  15
Ile Leu Ala Val Leu Tyr Leu Phe Ile Tyr Ile Phe Thr Lys Ile Ser
             20                  25                  30
Val Asp Met Tyr Ala Gly Ala Ile Phe Ile Gln Gln Ser Leu His Leu
         35                  40                  45
Asp Leu Tyr Leu Ala Ile Val Gly Leu Leu Ala Ile Thr Ala Val Tyr
     50                  55                  60
Thr Val Ala Gly Gly Leu Ala Ala Val Ile Tyr Thr Asp Ala Leu Gln
 65                  70                  75                  80
Thr Leu Ile Met Leu Ile Gly Ala Leu Thr Leu Met Gly Tyr Ser Phe
                 85                  90                  95
Ala Ala Val Gly Gly Met Glu Gly Leu Lys Glu Lys Tyr Phe Leu Ala
            100                 105                 110
Leu Ala Ser Asn Arg Ser Glu Asn Ser Ser Cys Gly Leu Pro Arg Glu
        115                 120                 125
Asp Ala Phe His Ile Phe Arg Asp Pro Leu Thr Ser Asp Leu Pro Trp
    130                 135                 140
Pro Gly Val Leu Phe Gly Met Ser Ile Pro Ser Leu Xaa  *
145                 150                 155     157
```

<210> 915
<211> 108
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(108)
<223> X = any amino acid or stop code

<400> 915

```
Xaa Ser Ala Ser Ala Thr Ser Leu Thr Leu Ser His Cys Val Asp Val
  1               5                  10                  15
Val Lys Gly Leu Leu Asp Phe Lys Lys Arg Arg Gly His Ser Ile Gly
             20                  25                  30
Gly Ala Pro Glu Gln Arg Tyr Gln Ile Ile Pro Val Met Cys Cys Ser
         35                  40                  45
Leu Leu Ala Thr Gly Gly Ala Asp Arg Leu Ile His Leu Trp Asn Val
     50                  55                  60
Val Gly Ser Arg Leu Glu Ala Asn Gln Thr Leu Glu Gly Ala Gly Gly
 65                  70                  75                  80
Ser Ile Thr Ser Val Asp Phe Asp Pro Ser Gly Tyr Gln Val Leu Ala
                 85                  90                  95
Ala Thr Tyr Asn Gln Val Ala Gln Phe Trp Lys  *
            100                 105     107
```

<210> 916
<211> 45
<212>Amino acid
<213> Homo sapiens

<400> 916
Gln Lys Arg Phe Pro Ser Asn Cys Gly Arg Asp Gly Lys Leu Phe Leu
1 5 10 15
Trp Gly Gln Ala Leu His Ile Ile Ala Lys Leu Leu Gly Lys Trp Arg
20 25 30
Arg Leu Gly Met Val Phe Phe Ser Leu Leu Leu Ser Tyr
35 40 45

<210> 917
<211> 180
<212>Amino acid
<213> Homo sapiens

<400> 917
Val His Val Cys Ser Ser Lys Met Gly Ala Leu Ser Thr Glu Arg Leu
1 5 10 15
Gln Tyr Tyr Thr Gln Glu Leu Gly Val Arg Glu Arg Ser Gly His Ser
20 25 30
Val Ser Leu Ile Asp Leu Trp Gly Leu Leu Val Glu Tyr Leu Leu Tyr
35 40 45
Gln Glu Glu Asn Pro Ala Lys Leu Ser Asp Gln Gln Glu Ala Val Arg
50 55 60
Gln Gly Gln Asn Pro Tyr Pro Ile Tyr Thr Ser Val Asn Val Arg Thr
65 70 75 80
Asn Leu Ser Gly Glu Asp Phe Ala Glu Trp Cys Glu Phe Thr Pro Tyr
85 90 95
Glu Val Gly Phe Pro Lys Tyr Gly Ala Tyr Val Pro Thr Glu Leu Phe
100 105 110
Gly Ser Glu Leu Phe Met Gly Arg Leu Leu Gln Leu Gln Pro Glu Pro
115 120 125
Arg Ile Cys Tyr Leu Gln Gly Met Trp Gly Ser Ala Phe Ala Thr Ser
130 135 140
Leu Asp Glu Ile Phe Leu Lys Thr Ala Gly Ser Gly Leu Ser Phe Leu
145 150 155 160
Glu Trp Tyr Arg Gly Ser Val Asn Ile Thr Asp Asp Cys Gln Lys Pro
165 170 175
Gln Leu His Asn
180

<210> 918
<211> 281
<212>Amino acid
<213> Homo sapiens

<400> 918

```
Glu Phe Leu Gly Arg Pro Thr Arg Pro Ala Lys Asp Glu Gly Asn Asp
  1               5                  10                  15
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
             20                  25                  30
Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp
         35                  40                  45
Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
     50                  55                  60
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
 65                  70                  75                  80
Glu Gly Lys Asp Glu Gly Asn Asp Glu Gly Lys Asp Glu Gly Lys Asp
                 85                  90                  95
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
            100                 105                 110
Glu Arg Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Lys Asp
        115                 120                 125
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
    130                 135                 140
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Asn Asp
145                 150                 155                 160
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
                165                 170                 175
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Asn Asp Glu Gly Asn Asp
            180                 185                 190
Glu Gly Asn Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Arg Asn Asp
        195                 200                 205
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
    210                 215                 220
Glu Arg Asn Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp
225                 230                 235                 240
Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp Glu Gly Lys Asp
                245                 250                 255
Glu Gly Asn Asp Glu Gly Lys Asp Glu Arg Lys Asp Glu Gly Lys Asp
            260                 265                 270
Glu Gly Lys Asp Glu Gly Lys Asp Lys
        275                 280 281
```

<210> 919
<211> 147
<212>Amino acid
<213> Homo sapiens

<400> 919

```
Pro Ser Leu Arg Pro Ala Trp His Glu Gly Glu Asp Phe Ser Tyr Gly
  1               5                  10                  15
Leu Gln Pro Tyr Cys Gly Tyr Ser Phe Gln Val Val Gly Glu Met Ile
             20                  25                  30
Arg Asn Arg Glu Val Leu Pro Cys Pro Asp Asp Cys Pro Ala Trp Ala
         35                  40                  45
Tyr Ala Leu Met Ile Glu Gly Trp Asn Glu Phe Pro Ser Arg Arg Ala
     50                  55                  60
Arg Phe Lys Asp Ile His Ser Arg Leu Arg Ala Trp Gly Asn Leu Ser
 65                  70                  75                  80
Asn Tyr Asn Ser Ser Glu Gln Thr Ser Gly Gly Arg Asn Thr Thr Gln
                 85                  90                  95
Thr Ser Ser Leu Ser Thr Ser Pro Leu Cys Asn Val Ser Asn Ala Pro
            100                 105                 110
Tyr Val Gly Pro Lys Gln Lys Val Pro Pro Phe Pro Gln Thr Gln Val
```

```
        115                 120                 125
Ile Pro Met Lys Gly Gln Ile Arg Pro Met Val Pro Pro Pro Gln Leu
    130                 135                 140
Tyr Val Pro
145     147
```

<210> 920
<211> 150
<212>Amino acid
<213> Homo sapiens

<400> 920

```
Arg Asn Ser Gly Arg His Pro Arg Val Arg Trp Ile Leu Glu Glu Arg
  1               5                  10                  15
Lys Arg Val Met Gln Glu Ala Cys Ala Lys Tyr Arg Ala Ser Ser Ser
             20                  25                  30
Arg Arg Ala Val Thr Pro Arg His Val Ser Arg Ile Phe Val Glu Asp
         35                  40                  45
Arg His Arg Val Leu Tyr Cys Glu Val Pro Lys Ala Gly Cys Ser Asn
     50                  55                  60
Trp Lys Arg Val Leu Met Val Leu Ala Gly Leu Ala Ser Ser Thr Ala
 65                  70                  75                  80
Asp Ile Gln His Asn Thr Val His Tyr Gly Ser Ala Leu Lys Arg Leu
                 85                  90                  95
Asp Thr Phe Asp Arg Gln Gly Ile Leu His Arg Leu Ser Thr Tyr Thr
            100                 105                 110
Lys Met Leu Phe Val Arg Glu Pro Phe Glu Arg Leu Val Ser Ala Phe
        115                 120                 125
Arg Asp Lys Phe Glu His Pro Asn Ser Tyr Tyr His Pro Val Phe Cys
    130                 135                 140
Met Ala Ile Leu Ala Arg
145                 150
```

<210> 921
<211> 125
<212>Amino acid
<213> Homo sapiens

<400> 921

```
Ile Met Tyr Ser Ile Ser Pro Ala Asn Ser Glu Glu Gly Gln Glu Leu
  1               5                  10                  15
Tyr Val Cys Thr Val Lys Asp Asp Val Asn Leu Asp Thr Val Leu Leu
             20                  25                  30
Leu Pro Phe Leu Lys Glu Ile Ala Val Ser Gln Leu Asp Gln Leu Ser
         35                  40                  45
Pro Glu Glu Gln Leu Leu Val Lys Cys Ala Ala Ile Ile Gly His Ser
     50                  55                  60
Phe His Ile Asp Leu Leu Gln His Leu Leu Pro Gly Trp Asp Lys Asn
 65                  70                  75                  80
Lys Leu Leu Gln Val Leu Arg Ala Leu Val Asp Ile His Val Leu Cys
                 85                  90                  95
Trp Ser Asp Lys Ser Gln Glu Leu Pro Ala Glu Pro Ile Leu Met Pro
            100                 105                 110
Ser Ser Ile Asp Ile Ile Asp Gly Thr Lys Glu Lys Lys
```

115 120 125

<210> 922
<211> 111
<212>Amino acid
<213> Homo sapiens

<400> 922
Gly Pro His Val Val Leu Val Leu Arg Arg Cys Phe Leu Leu Ser Tyr
1 5 10 15
Phe Lys Gly Val Glu Lys Ala Lys Ala Met Pro Ser Pro Arg Ile Leu
20 25 30
Lys Thr His Leu Ser Thr Gln Leu Leu Pro Pro Ser Phe Trp Glu Asn
35 40 45
Asn Cys Lys Val Arg Tyr Gln Gln Leu Pro Val Thr Glu Gly Lys Val
50 55 60
Ser Gln Pro Lys Arg Val Leu Gln Thr Pro Thr Gln Ser Ile Arg Asp
65 70 75 80
His Leu Cys Leu Ser Thr Val Ser Asp Ala Tyr Gln Gln Arg Glu Asn
85 90 95
Ile Lys Phe Tyr Ile Gln Gln Asp Ile His Leu Asn Ser Phe Lys
100 105 110 111

<210> 923
<211> 69
<212>Amino acid
<213> Homo sapiens

<400> 923
Phe Tyr Tyr Ile Cys Arg Leu Ser Lys Glu Asp Lys Ala Phe Leu Trp
1 5 10 15
Glu Lys Arg Tyr Tyr Cys Phe Lys His Pro Asn Cys Leu Pro Lys Ile
20 25 30
Leu Ala Ser Ala Pro Asn Trp Lys Trp Val Asn Leu Ala Lys Thr Tyr
35 40 45
Ser Leu Leu His Gln Trp Pro Ala Leu Tyr Pro Leu Ile Ala Leu Glu
50 55 60
Leu Leu Asp Ser Lys
65 69

<210> 924
<211> 120
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(120)
<223> X = any amino acid or stop code

<400> 924
Lys Met Met Ile Xaa Gly Leu Phe Glu Ile Gln Gln Cys Pro Ile Gly
1 5 10 15
Lys His Cys Asn Phe Leu Gln Val Leu Arg Asn Pro Asn Arg Asp Leu
20 25 30
Trp Leu Val Ser Ser Phe Gly Lys Ser Ser Lys Gly Arg Glu Arg Met
35 40 45
Gly His His Asp Glu Tyr Tyr Arg Leu Arg Gly Arg His Asn Pro Ser
50 55 60
Pro Asp His Ser Tyr Lys Arg Asn Gly Glu Ser Glu Arg Lys Arg Lys
65 70 75 80
Lys Ser His Xaa His Met Ser Lys Ser Gln Glu Arg His Asn Ser Pro
85 90 95
Ser Arg Gly Arg Asn Ser Asp Arg Ser Gly Gly Arg Cys Ser Arg Ser
100 105 110
Asp Asn Gly Arg Ser Arg Tyr Arg
115 120

<210> 925
<211> 108
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(108)
<223> X = any amino acid or stop code

<400> 925
Pro Leu Ser Leu Phe Ala Arg Val Ala Gly Ser Arg Val Glu Met Pro
1 5 10 15
Glu Pro Pro Gly Leu Gly Asp Glu Gly Arg Pro Leu Leu His Pro Gly
20 25 30
Arg Arg Glu Ala Val Gly Ser Trp Val Ser Ala Phe Ala Gly Asp Ser
35 40 45
Thr Pro Cys Gly Pro Gly Asp Leu Ser Val Pro Arg Arg Glu Pro Phe
50 55 60
Arg Leu Thr Ala Leu Xaa Pro His Arg Ser Pro Val Val Arg Thr Ser
65 70 75 80
Leu Ile Gly Leu Leu Leu Gly Phe Ser Val Lys Glu Glu Leu Arg Gly
85 90 95
Val Gly Trp Ala Ala Arg Thr Pro Leu Gly Ile Arg
100 105 108

<210> 926
<211> 305
<212>Amino acid
<213> Homo sapiens

<400> 926
Phe Asp Lys Arg Gln His Glu Ala Arg Ile Gln Gln Met Glu Asn Glu
1 5 10 15
Ile His Tyr Leu Gln Glu Asn Leu Lys Ser Met Glu Glu Ile Gln Gly

```
            20                  25                  30
Leu Thr Asp Leu Gln Leu Gln Glu Ala Asp Glu Glu Lys Glu Arg Ile
        35                  40                  45
Leu Ala Gln Leu Arg Glu Leu Glu Lys Lys Lys Lys Leu Glu Asp Ala
    50                  55                  60
Lys Ser Gln Glu Gln Val Phe Gly Leu Asp Lys Glu Leu Lys Lys Leu
65                  70                  75                  80
Lys Lys Ala Val Ala Thr Ser Asp Lys Leu Ala Thr Ala Glu Leu Thr
                85                  90                  95
Ile Ala Lys Asp Gln Leu Lys Ser Leu His Gly Thr Val Met Lys Ile
            100                 105                 110
Asn Gln Glu Arg Ala Glu Glu Leu Gln Glu Ala Glu Arg Phe Ser Arg
        115                 120                 125
Lys Ala Ala Gln Ala Ala Arg Asp Leu Thr Arg Ala Glu Ala Glu Ile
    130                 135                 140
Glu Leu Leu Gln Asn Leu Leu Arg Gln Lys Gly Glu Gln Phe Arg Leu
145                 150                 155                 160
Glu Met Glu Lys Thr Gly Val Gly Thr Gly Ala Asn Ser Gln Val Leu
                165                 170                 175
Glu Ile Glu Lys Leu Asn Glu Thr Met Glu Arg Gln Arg Thr Glu Ile
            180                 185                 190
Ala Arg Leu Gln Asn Val Leu Tyr Leu Thr Gly Ser Asp Asn Lys Gly
        195                 200                 205
Gly Phe Glu Asn Val Leu Glu Glu Ile Ala Glu Leu Arg Arg Glu Gly
    210                 215                 220
Ser Tyr Gln Asn Asp Tyr Ile Ser Ser Met Ala Asp Pro Phe Lys Arg
225                 230                 235                 240
Arg Gly Tyr Trp Tyr Phe Met Pro Pro Pro Pro Ser Ser Lys Val Ser
                245                 250                 255
Ser His Ser Ser Gln Ala Thr Lys Asp Ser Gly Val Gly Leu Lys Tyr
            260                 265                 270
Ser Ala Ser Thr Pro Val Arg Lys Pro Arg Pro Gly Gln Gln Asp Gly
        275                 280                 285
Lys Glu Gly Ser Gln Pro Pro Pro Ala Ser Gly Tyr Trp Val Tyr Ser
    290                 295                 300
Pro
305
```

<210> 927
<211> 303
<212>Amino acid
<213> Homo sapiens

<400> 927

```
Ser Asp Ala Ser Ser Phe Lys Thr Arg Val Ile Val Val Pro Arg Pro
  1                 5                  10                  15
Arg Val Phe Pro Leu Gly Ser Ala Ile Thr Glu Asn Ser Leu Glu Ser
            20                  25                  30
Asp Ser Gln Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Leu
        35                  40                  45
Val Ala Asp Lys Val Ile Val Thr Ser Lys His Asn Asn Asp Thr Gln
    50                  55                  60
His Ile Trp Glu Ser Asp Ser Asn Glu Phe Ser Val Ile Ala Asp Pro
65                  70                  75                  80
Arg Gly Asn Thr Leu Gly Arg Gly Thr Thr Ile Thr Leu Val Leu Lys
                85                  90                  95
Glu Glu Ala Ser Asp Tyr Leu Glu Leu Asp Thr Ile Lys Asn Leu Val
            100                 105                 110
Lys Lys Tyr Ser Gln Phe Ile Asn Phe Pro Ile Tyr Val Trp Ser Ser
```

```
        115                 120                 125
Lys Thr Glu Thr Val Glu Glu Pro Met Glu Glu Glu Glu Ala Ala Lys
    130                 135                 140
Glu Glu Lys Glu Glu Ser Asp Asp Glu Ala Ala Val Glu Glu Glu Glu
145                 150                 155                 160
Glu Glu Lys Lys Pro Lys Thr Lys Lys Val Glu Lys Thr Val Trp Asp
                165                 170                 175
Trp Glu Leu Met Asn Asp Ile Lys Pro Ile Trp Gln Arg Pro Ser Lys
            180                 185                 190
Glu Val Glu Glu Asp Glu Tyr Lys Ala Phe Tyr Lys Ser Phe Ser Lys
        195                 200                 205
Glu Ser Asp Asp Pro Met Ala Tyr Ile His Phe Thr Ala Glu Gly Glu
    210                 215                 220
Val Thr Phe Lys Ser Ile Leu Phe Val Pro Thr Ser Ala Pro Arg Gly
225                 230                 235                 240
Leu Phe Asp Glu Tyr Gly Ser Lys Lys Ser Asp Tyr Ile Lys Leu Tyr
                245                 250                 255
Val Arg Arg Val Phe Ile Thr Asp Asp Phe His Asp Met Met Pro Lys
            260                 265                 270
Tyr Leu Asn Phe Val Lys Gly Val Val Asp Ser Asp Asp Leu Pro Leu
        275                 280                 285
Asn Val Ser Arg Glu Thr Leu Gln Gln His Lys Leu Leu Lys Val
    290                 295                 300         303
```

<210> 928
<211> 147
<212>Amino acid
<213> Homo sapiens

<400> 928

```
Cys Gly Ser Trp Met Arg Arg Ala Leu Ile Pro Pro Cys Arg Gly Gly
  1               5                  10                  15
Pro Ser Ala Ser Asp Arg Cys Cys Ser Cys Ser Pro Ser Gly Phe Ser
            20                  25                  30
Ala Gly Arg Gly Arg Cys Pro Val Gln Gly Cys Leu Arg Pro His Arg
        35                  40                  45
Val Gln Leu Leu Arg Arg Trp Gly Pro Gly Ser Pro Ala Gly Gln Arg
    50                  55                  60
Leu Ser Lys Gly Phe Gln Leu Leu Arg Trp Trp Gly Pro Gly Ser Pro
65                  70                  75                  80
Ala Pro Glu Pro Arg Lys Gly Pro Phe Pro Pro Pro Asp Pro Pro Trp
                85                  90                  95
Pro Val Thr Ala Val Thr Val Met Ala Gly Ser Val Pro Ser Ala Gln
            100                 105                 110
Ser Val Asp Ala Leu Glu Ser Pro Gly Pro Leu Ala Leu Glu Gly Pro
        115                 120                 125
Ser Ser Pro Arg Asn Leu Leu Trp Arg Glu Met Ser Ile Phe Leu Pro
    130                 135                 140
Gly Ile Phe
145     147
```

<210> 929
<211> 183
<212>Amino acid
<213> Homo sapiens

<400> 929

```
Pro Gly Pro Thr Pro Pro Pro Arg His Gly Ser Pro Pro His Arg Leu
 1               5                  10                  15
Ile Arg Val Glu Thr Pro Gly Pro Pro Ala Pro Pro Ala Asp Glu Arg
            20                  25                  30
Ile Ser Gly Pro Pro Ala Ser Ser Asp Arg Leu Ala Ile Leu Glu Asp
        35                  40                  45
Tyr Ala Asp Pro Phe Asp Val Gln Glu Thr Gly Glu Gly Ser Ala Gly
    50                  55                  60
Ala Ser Gly Ala Pro Glu Lys Val Pro Glu Asn Asp Gly Tyr Met Glu
65                  70                  75                  80
Pro Tyr Glu Ala Gln Lys Met Met Ala Glu Ile Arg Gly Ser Lys Glu
                85                  90                  95
Thr Ala Thr Gln Pro Leu Pro Leu Tyr Asp Thr Pro Tyr Glu Pro Glu
            100                 105                 110
Glu Asp Gly Ala Thr Pro Glu Gly Glu Gly Ala Pro Trp Pro Arg Glu
        115                 120                 125
Ser Arg Leu Pro Glu Asp Asp Glu Arg Pro Pro Glu Glu Tyr Asp Gln
    130                 135                 140
Pro Trp Glu Trp Lys Lys Glu Arg Ile Ser Lys Ala Phe Ala Val Asp
145                 150                 155                 160
Ile Lys Val Ile Lys Asp Leu Pro Trp Pro Pro Pro Val Gly Gln Leu
                165                 170                 175
Asp Ser Ser Pro Ser Leu Pro
            180         183
```

<210> 930
<211> 187
<212>Amino acid
<213> Homo sapiens

<400> 930

```
Gln Phe Phe Ser Leu Phe Leu Arg Tyr Gln Ile His Thr Gly Leu Gln
 1               5                  10                  15
His Ser Ile Ile Arg Pro Thr Gln Pro Asn Cys Leu Pro Leu Asp Asn
            20                  25                  30
Ala Thr Leu Pro Gln Lys Leu Lys Glu Val Gly Tyr Ser Thr His Met
        35                  40                  45
Val Gly Lys Trp His Leu Gly Phe Tyr Arg Lys Glu Cys Met Pro Thr
    50                  55                  60
Arg Arg Gly Phe Asp Thr Phe Phe Gly Ser Leu Leu Gly Ser Gly Asp
65                  70                  75                  80
Tyr Tyr Thr His Tyr Lys Cys Asp Ser Pro Gly Met Cys Gly Tyr Asp
                85                  90                  95
Leu Tyr Glu Asn Asp Asn Ala Ala Trp Asp Tyr Asp Asn Gly Ile Tyr
            100                 105                 110
Ser Thr Gln Met Tyr Thr Gln Arg Val Gln Gln Ile Leu Ala Ser His
        115                 120                 125
Asn Pro Thr Lys Pro Ile Phe Leu Tyr Ile Ala Tyr Gln Ala Val His
    130                 135                 140
Ser Pro Leu Gln Ala Pro Gly Arg Tyr Phe Glu His Tyr Arg Ser Ile
145                 150                 155                 160
Ile Asn Ile Asn Arg Arg Arg Tyr Ala Ala Met Leu Ser Cys Leu Asp
                165                 170                 175
Glu Ala Ile Asn Asn Val Thr Leu Ala Leu Lys
            180                 185     187
```

<210> 931
<211> 192
<212>Amino acid
<213> Homo sapiens

<400> 931

```
Arg Val Arg Lys Gly Arg Gly Gly Glu Arg Leu Gln Ser Pro Leu Arg
 1               5                  10                  15
Val Pro Gln Lys Pro Glu Arg Pro Pro Leu Pro Pro Lys Pro Gln Phe
            20                  25                  30
Leu Asn Ser Gly Ala Tyr Pro Gln Lys Pro Leu Arg Asn Gln Gly Val
        35                  40                  45
Val Arg Thr Leu Ser Ser Ser Ala Gln Glu Asp Ile Ile Arg Trp Phe
    50                  55                  60
Lys Glu Glu Gln Leu Pro Leu Arg Ala Gly Tyr Gln Lys Thr Ser Asp
65                  70                  75                  80
Thr Ile Ala Pro Trp Phe His Gly Ile Leu Thr Leu Lys Lys Ala Asn
                85                  90                  95
Glu Leu Leu Leu Ser Thr Gly Met Pro Gly Ser Phe Leu Ile Arg Val
            100                 105                 110
Ser Glu Arg Ile Lys Gly Tyr Ala Leu Ser Tyr Leu Ser Glu Asp Gly
        115                 120                 125
Cys Lys His Phe Leu Ile Asp Ala Ser Ala Asp Ala Tyr Ser Phe Leu
    130                 135                 140
Gly Val Asp Gln Leu Gln His Ala Thr Leu Ala Asp Leu Val Glu Tyr
145                 150                 155                 160
His Lys Glu Glu Pro Ile Thr Ser Leu Gly Lys Glu Leu Leu Leu Tyr
                165                 170                 175
Pro Cys Gly Gln Gln Asp Gln Leu Pro Asp Tyr Leu Glu Leu Phe Glu
            180                 185                 190     192
```

<210> 932
<211> 545
<212>Amino acid
<213> Homo sapiens

<400> 932

```
Gly Ser Leu Glu Lys Ala Leu Phe Gln Leu Leu Lys Val Trp Gly Gln
 1               5                  10                  15
Trp Ala Glu Gln Thr Arg Arg Leu Gln Arg Leu Asp Val Ser Leu Ser
            20                  25                  30
Val Ala Arg Val Arg Ser Ala Gly Pro Ser Cys Gln Asn Lys Gly Asp
        35                  40                  45
Leu Val Met Glu Ala Leu Leu Glu Gly Ile Gln Asn Arg Gly His Gly
    50                  55                  60
Gly Gly Phe Leu Thr Ser Cys Glu Ala Glu Leu Gln Glu Leu Met Lys
65                  70                  75                  80
Gln Ile Asp Ile Met Val Ala His Lys Lys Ser Glu Trp Glu Gly Arg
                85                  90                  95
Thr His Ala Leu Glu Thr Cys Leu Lys Ile Arg Glu Gln Glu Leu Lys
            100                 105                 110
Ser Leu Arg Ser Gln Leu Asp Val Thr His Lys Glu Val Gly Met Leu
```

```
        115                 120                 125
His Gln Gln Val Glu Glu His Glu Lys Ile Lys Gln Glu Met Thr Met
    130                 135                 140
Glu Tyr Lys Gln Glu Leu Lys Lys Leu His Glu Glu Leu Cys Ile Leu
145                 150                 155                 160
Lys Arg Ser Tyr Glu Lys Leu Gln Lys Lys Gln Met Arg Glu Phe Arg
                165                 170                 175
Gly Asn Thr Lys Asn His Arg Glu Asp Arg Ser Glu Ile Glu Arg Leu
            180                 185                 190
Thr Ala Lys Ile Glu Glu Phe Arg Gln Lys Ser Leu Asp Trp Glu Lys
        195                 200                 205
Gln Arg Leu Ile Tyr Gln Gln Gln Val Ser Ser Leu Glu Ala Gln Arg
    210                 215                 220
Lys Ala Leu Ala Glu Gln Ser Glu Ile Ile Gln Ala Gln Leu Val Asn
225                 230                 235                 240
Arg Lys Gln Lys Leu Glu Ser Val Glu Leu Ser Ser Gln Ser Glu Ile
                245                 250                 255
Gln His Leu Ser Ser Lys Leu Glu Arg Ala Asn Asp Thr Ile Cys Ala
            260                 265                 270
Asn Glu Leu Glu Ile Glu Arg Leu Thr Met Arg Val Asn Asp Leu Val
        275                 280                 285
Gly Thr Ser Met Thr Val Leu Gln Glu Gln Gln Gln Lys Glu Glu Lys
    290                 295                 300
Leu Arg Glu Ser Glu Lys Leu Leu Glu Ala Leu Gln Glu Glu Lys Arg
305                 310                 315                 320
Glu Leu Lys Ala Ala Leu Gln Ser Gln Glu Asn Leu Ile His Glu Ala
                325                 330                 335
Arg Ile Gln Lys Glu Lys Leu Gln Glu Lys Val Lys Ala Thr Asn Thr
            340                 345                 350
Gln His Ala Val Glu Ala Ile Ser Leu Glu Ser Val Ser Ala Thr Cys
        355                 360                 365
Lys Gln Leu Ser Gln Glu Leu Met Glu Lys Tyr Glu Glu Leu Lys Arg
    370                 375                 380
Met Glu Ala His Asn Asn Glu Tyr Lys Ala Glu Ile Lys Lys Leu Lys
385                 390                 395                 400
Glu Gln Ile Leu Gln Gly Glu Gln Ser Tyr Ser Ser Ala Leu Glu Gly
                405                 410                 415
Met Lys Met Glu Ile Ser His Leu Thr Gln Glu Leu His Gln Arg Asp
            420                 425                 430
Ile Thr Ile Ala Ser Thr Lys Gly Ser Ser Ser Asp Met Glu Lys Arg
        435                 440                 445
Leu Arg Ala Glu Met Gln Lys Ala Glu Asp Lys Ala Val Glu His Lys
    450                 455                 460
Glu Ile Leu Asp Gln Leu Glu Ser Leu Lys Leu Glu Asn Arg His Leu
465                 470                 475                 480
Ser Glu Met Val Met Lys Leu Glu Leu Gly Leu His Glu Cys Ser Leu
                485                 490                 495
Pro Val Ser Pro Leu Gly Ser Ile Ala Thr Arg Phe Leu Glu Glu Glu
            500                 505                 510
Glu Leu Arg Ser His His Ile Leu Glu Arg Leu Asp Ala His Ile Glu
        515                 520                 525
Glu Leu Lys Arg Glu Ser Glu Lys Thr Val Arg Gln Phe Thr Ala Leu
    530                 535                 540
Lys
545
```

<210> 933
<211> 297
<212>Amino acid
<213> Homo sapiens

<400> 933

```
Thr Gly Phe Leu Gly Trp Ser Gln Gly Pro Ser Leu Thr Pro Thr Ser
 1               5                  10                  15
Leu Ser Ala Leu Tyr Pro Ser Gln Val Glu Glu Thr Gly Val Val Leu
            20                  25                  30
Ser Leu Glu Gln Thr Glu Gln His Ser Arg Arg Pro Ile Gln Arg Gly
        35                  40                  45
Ala Pro Ser Gln Lys Asp Thr Pro Asn Pro Gly Asp Ser Leu Asp Thr
    50                  55                  60
Pro Gly Pro Arg Ile Leu Ala Phe Leu His Pro Pro Ser Leu Ser Glu
65                  70                  75                  80
Ala Ala Leu Ala Ala Asp Pro Arg Arg Phe Cys Ser Pro Asp Leu Arg
                85                  90                  95
Arg Leu Leu Gly Pro Ile Leu Asp Gly Ala Ser Val Ala Ala Thr Pro
            100                 105                 110
Ser Thr Pro Leu Ala Thr Arg His Pro Gln Ser Pro Leu Ser Ala Asp
        115                 120                 125
Leu Pro Asp Glu Leu Pro Val Gly Thr Glu Asn Val His Arg Leu Phe
    130                 135                 140
Thr Ser Gly Lys Asp Thr Glu Ala Val Glu Thr Asp Leu Asp Ile Ala
145                 150                 155                 160
Gln Asp Ala Asp Ala Leu Asp Leu Glu Met Leu Ala Pro Tyr Ile Ser
                165                 170                 175
Met Asp Asp Asp Phe Gln Leu Asn Ala Ser Glu Gln Leu Pro Arg Ala
            180                 185                 190
Tyr His Arg Pro Leu Gly Ala Val Pro Arg Pro Arg Ala Arg Ser Phe
        195                 200                 205
His Gly Leu Ser Pro Pro Ala Leu Glu Pro Ser Leu Leu Pro Arg Trp
    210                 215                 220
Gly Ser Asp Pro Arg Leu Ser Cys Ser Ser Pro Ser Arg Gly Asp Pro
225                 230                 235                 240
Ser Ala Ser Ser Pro Met Ala Gly Ala Arg Lys Arg Thr Leu Ala Gln
                245                 250                 255
Ser Ser Lys Asp Glu Asp Glu Gly Val Glu Leu Leu Gly Val Arg Pro
            260                 265                 270
Pro Lys Arg Ser Pro Ser Pro Glu His Glu Asn Phe Leu Leu Phe Pro
        275                 280                 285
Leu Ser Leu Ser Phe Leu Leu Thr Gly
    290                 295     297
```

<210> 934
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 934

```
Glu Leu Gln Asp Cys Phe Asp Val His Asp Ala Ser Trp Glu Glu Gln
 1               5                  10                  15
Ile Phe Trp Gly Trp His Asn Asp Val His Ile Phe Asp Thr Lys Thr
            20                  25                  30
Gln Thr Trp Phe Gln Pro Glu Ile Lys Gly Gly Val Pro Pro Gln Pro
        35                  40                  45
Arg Ala Ala His Thr Cys Ala Val Leu Gly Asn Lys Gly Tyr Ile Phe
    50                  55                  60
Gly Gly Arg Val Leu Gln Thr Arg Met Asn Asp Leu His Tyr Leu Asn
65                  70                  75                  80
Leu Asp Thr Trp Thr Trp Ser Gly Arg Ile Thr Ile Asn Gly Glu Ser
```

```
                85                  90                  95
Pro Lys His Arg Ser Trp His Thr Leu Thr Pro Ile Ala Asp Asp Lys
            100                 105                 110
Leu Phe Leu Cys Gly Gly Leu Asn Ala Tyr Asn Met Pro Leu Ser Asp
        115                 120                 125
Gly Trp Ile His Asn Val Thr Thr His Cys Trp Lys
    130                 135                 140
```

<210> 935
<211> 97
<212>Amino acid
<213> Homo sapiens

<400> 935

```
Phe Phe Phe Leu Arg Thr Arg Ser His Ser Val Thr Pro Arg Trp Glu
  1               5                  10                  15
Cys Ser Asp Asp Ile Thr Ala His Trp Gln Pro Gln Pro Trp Gly Ser
            20                  25                  30
Ser Asp Pro Leu Thr Phe Ser Arg Pro Gln Val Val Val Pro Pro Arg
        35                  40                  45
His Thr Thr Leu Cys Pro Ala Asn Phe Phe Val Phe Cys Ile Phe Cys
    50                  55                  60
Arg Asn Arg Ile Ser Pro Cys Trp Pro Gly Trp Ser Arg Thr Pro Trp
65                  70                  75                  80
Ala Gln Leu Ile Arg Leu Pro Arg Pro Pro Lys Val Leu Gly Leu Gln
                85                  90                  95
Val
 97
```

<210> 936
<211> 245
<212>Amino acid
<213> Homo sapiens

<400> 936

```
Pro Arg Glu Gly Gln Val Lys Gln Gly Leu Leu Gly Asp Cys Trp Phe
  1               5                  10                  15
Leu Cys Ala Cys Ala Ala Leu Gln Lys Ser Arg His Leu Leu Asp Gln
            20                  25                  30
Val Ile Pro Pro Gly Gln Pro Ser Trp Ala Asp Gln Glu Tyr Arg Gly
        35                  40                  45
Ser Phe Thr Cys Arg Ile Trp Gln Phe Gly Arg Trp Val Glu Val Thr
    50                  55                  60
Thr Asp Asp Arg Leu Pro Cys Leu Ala Gly Arg Leu Cys Phe Ser Arg
65                  70                  75                  80
Cys Gln Arg Glu Asp Val Phe Trp Leu Pro Leu Leu Glu Lys Val Tyr
                85                  90                  95
Ala Lys Val His Gly Ser Tyr Glu His Leu Trp Ala Gly Gln Val Ala
            100                 105                 110
Asp Ala Leu Val Asp Leu Thr Gly Gly Leu Ala Glu Arg Trp Asn Leu
        115                 120                 125
Lys Gly Val Ala Gly Ser Gly Gly Gln Gln Asp Arg Pro Gly Arg Trp
    130                 135                 140
Glu His Arg Thr Cys Arg Gln Leu Leu His Leu Lys Asp Gln Cys Leu
```

```
145                 150                 155                 160
Ile Ser Cys Cys Val Leu Ser Pro Arg Ala Gly Glu Ala Arg Gly Gln
                165                 170                 175
His Gly Arg Ala Ala Ala Ser Val Pro Pro Thr Ala Arg Pro Gln Ala
            180                 185                 190
His Cys Ser Phe Leu Cys Asp Trp Leu His Ser Pro Val Arg Thr Lys
        195                 200                 205
Trp Glu Glu Val Ser Leu Phe Ser Arg Val Val Ser Ser Val Cys Asp
    210                 215                 220
Leu Pro Leu Leu Ser Ser Ser Arg Gly Thr Trp Pro Phe Ser Pro Leu
225                 230                 235                 240
Thr Ser Pro Phe His
                245
```

<210> 937
<211> 211
<212>Amino acid
<213> Homo sapiens

<400> 937

```
Ala Glu Cys Leu Glu Ala Ser Ile Ala Arg Tyr Ala His Arg Val Ala
  1               5                  10                  15
Asn Ser Arg Tyr Thr Phe Asp Gly Glu Thr Val Thr Leu Ser Pro Ser
            20                  25                  30
Gln Gly Val Asn Gln Leu His Gly Gly Pro Glu Gly Phe Asp Lys Arg
        35                  40                  45
Arg Trp Gln Ile Val Asn Gln Asn Asp Arg Gln Val Leu Phe Ala Leu
    50                  55                  60
Ser Ser Asp Asp Gly Asp Gln Gly Phe Pro Gly Asn Leu Gly Ala Thr
65                  70                  75                  80
Val Gln Tyr Arg Leu Thr Asp Asp Asn Arg Ile Ser Ile Thr Tyr Arg
                85                  90                  95
Ala Thr Val Asp Lys Pro Cys Pro Val Asn Met Thr Asn His Val Tyr
            100                 105                 110
Phe Asn Leu Asp Gly Glu Gln Ser Asp Val Arg Asn His Lys Leu Gln
        115                 120                 125
Ile Leu Ala Asp Glu Tyr Leu Pro Val Asp Glu Gly Gly Ile Pro His
    130                 135                 140
Asp Gly Leu Lys Ser Val Ala Gly Thr Ser Phe Asp Phe Arg Ser Ala
145                 150                 155                 160
Lys Ile Ile Ala Ser Glu Phe Leu Ala Asp Asp Asp Gln Arg Lys Val
                165                 170                 175
Lys Gly Tyr Asp His Ala Phe Leu Leu Gln Ala Lys Gly Asp Gly Lys
            180                 185                 190
Lys Val Ala Ala His Val Trp Ser Ala Asp Glu Lys Leu Gln Leu Lys
        195                 200                 205
Val Tyr Thr
    210 211
```

<210> 938
<211> 118
<212>Amino acid
<213> Homo sapiens

<400> 938

```
Pro Leu Ser Arg Phe Leu Ser Lys Glu Ser Gln Glu Asp Trp Gly Met
 1               5                  10                  15
Glu Arg Gln Ser Arg Val Met Ser Glu Lys Asp Glu Tyr Gln Phe Gln
            20                  25                  30
His Gln Gly Ala Val Glu Leu Leu Val Phe Asn Phe Leu Leu Ile Leu
        35                  40                  45
Thr Ile Leu Thr Ile Trp Leu Phe Lys Asn His Arg Phe Arg Phe Leu
    50                  55                  60
His Glu Thr Gly Gly Ala Met Val Tyr Asp Lys Pro Pro Lys Phe Ala
65                  70                  75                  80
Met Ser Arg Glu Gln Met Ser Gln Ser Cys Ser His Thr Ala His Asn
                85                  90                  95
Ala Ser Leu Leu Thr Asp Ala Gly Pro Leu Ser Cys Gly Glu Ser Arg
            100                 105                 110
Ala Ser Cys Leu Phe Leu
        115         118
```

<210> 939
<211> 143
<212>Amino acid
<213> Homo sapiens

<400> 939

```
Asp Ser Lys Glu Pro Arg Leu Gln Gln Leu Gly Leu Leu Glu Glu Glu
 1               5                  10                  15
Gln Leu Arg Gly Leu Gly Phe Arg Gln Thr Arg Gly Tyr Lys Ser Leu
            20                  25                  30
Ala Gly Cys Leu Gly His Gly Pro Leu Val Leu Gln Leu Leu Ser Phe
        35                  40                  45
Thr Leu Leu Ala Gly Leu Leu Val Gln Val Ser Lys Val Pro Ser Ser
    50                  55                  60
Ile Ser Gln Glu Gln Ser Arg Gln Asp Ala Ile Tyr Gln Asn Leu Thr
65                  70                  75                  80
Gln Leu Lys Ala Ala Val Gly Glu Leu Ser Glu Lys Ser Lys Leu Gln
                85                  90                  95
Glu Ile Tyr Gln Glu Leu Thr Gln Leu Lys Ala Ala Val Gly Glu Leu
            100                 105                 110
Pro Glu Lys Ser Lys Leu Gln Glu Ile Tyr Gln Glu Leu Thr Trp Leu
        115                 120                 125
Lys Ala Ala Val Gly Glu Leu Pro Glu Lys Ser Lys Met Gln Glu
    130                 135                 140         143
```

<210> 940
<211> 63
<212>Amino acid
<213> Homo sapiens

<400> 940

```
Met Gln Ser Ile Ala Trp Gly His Arg Arg Asp Arg Gly Glu Ser Pro
 1               5                  10                  15
Leu Gly Trp Gly Gln Glu Ser Glu Ala Ser Pro Ser Ala Leu Thr Glu
            20                  25                  30
Ala Pro Lys Ala Ala His Thr Thr Arg Leu Gly Phe Leu Ala Ala Asn
```

```
         35                  40                  45
Asn Pro Asn Gly His Ser Gln Pro Gln Asp Ser Phe Leu Leu  *
     50              55                  60      62
```

<210> 941
<211> 238
<212>Amino acid
<213> Homo sapiens

<400> 941

```
Phe Glu Thr Leu Ser Met Arg Gly Ile Pro His Met Leu Ala Leu Gly
  1               5                  10                  15
Pro Gln Gln Leu Leu Ala Gln Asp Glu Glu Gly Asp Thr Leu Leu His
             20                  25                  30
Leu Phe Ala Ala Arg Gly Leu Arg Trp Ala Ala Tyr Ala Ala Ala Glu
         35                  40                  45
Val Leu Gln Val Tyr Arg Arg Leu Asp Ile Arg Glu His Lys Gly Lys
     50                  55                  60
Thr Pro Leu Leu Val Ala Ala Ala Ala Asn Gln Pro Leu Ile Val Glu
 65                  70                  75                  80
Asp Leu Leu Asn Leu Gly Ala Glu Pro Asn Ala Ala Asp His Gln Gly
                 85                  90                  95
Arg Ser Val Leu His Val Ala Ala Thr Tyr Gly Leu Pro Gly Val Leu
            100                 105                 110
Leu Ala Val Leu Asn Ser Gly Val Gln Val Asp Leu Glu Ala Arg Asp
        115                 120                 125
Phe Glu Gly Leu Thr Pro Leu His Thr Ala Ile Leu Ala Leu Asn Val
    130                 135                 140
Ala Met Arg Pro Ser Asp Leu Cys Pro Arg Val Leu Ser Thr Gln Ala
145                 150                 155                 160
Arg Asp Arg Leu Asp Cys Val His Met Leu Leu Gln Met Gly Ala Asn
                165                 170                 175
His Thr Ile Gln Val Ser Gly Asp Val Gly Gly Gln Thr Leu Gly Asp
            180                 185                 190
Cys Val Glu Trp Gly His Leu Asp Val Arg Glu Leu Gln Ala Asn Ala
        195                 200                 205
Asp Phe Ala Ser Ser Leu Leu Arg Ala Leu Glu His Val Thr Ser Leu
    210                 215                 220
Leu Cys Ala Leu Arg Val Phe Cys Leu Phe Leu Cys Gln Leu
225                 230                 235         238
```

<210> 942
<211> 158
<212>Amino acid
<213> Homo sapiens

<400> 942

```
Asp Ala Trp Ala Asp Ala Trp Val Gly Thr Lys Met Ala Asp Leu Asp
  1               5                  10                  15
Ser Pro Pro Lys Leu Ser Gly Val Gln Gln Pro Ser Glu Gly Val Gly
             20                  25                  30
Gly Gly Arg Cys Ser Glu Ile Ser Ala Glu Leu Ile Arg Ser Leu Thr
         35                  40                  45
Glu Leu Gln Glu Leu Glu Ala Val Tyr Glu Arg Leu Cys Gly Glu Glu
```

```
     50                  55                  60
Lys Val Val Glu Arg Glu Leu Asp Ala Leu Leu Glu Gln Gln Asn Thr
 65                  70                  75                  80
Ile Glu Ser Lys Met Val Thr Leu His Arg Met Gly Pro Asn Leu Gln
                 85                  90                  95
Leu Ile Glu Gly Asp Ala Lys Gln Leu Ala Gly Met Ile Thr Phe Thr
            100                 105                 110
Cys Asn Leu Ala Glu Asn Val Ser Ser Lys Val Arg Gln Leu Asp Leu
        115                 120                 125
Ala Lys Asn Arg Leu Tyr Gln Ala Ile Gln Arg Ala Asp Asp Ile Leu
    130                 135                 140
Asp Leu Lys Phe Cys Met Asp Gly Val Gln Thr Ala Leu Arg
145                 150                 155         158
```

<210> 943
<211> 235
<212>Amino acid
<213> Homo sapiens

<400> 943

```
Ala Val Glu Phe Arg Val Pro Arg Ser Gly Ser Ala Tyr Leu Tyr Ser
  1               5                  10                  15
Tyr Val Thr Val Gly Glu Leu Trp Ala Phe Thr Thr Gly Trp Asn Leu
             20                  25                  30
Ile Leu Ser Tyr Val Ile Gly Thr Ala Ser Val Ala Arg Ala Trp Ser
         35                  40                  45
Ser Ala Phe Asp Asn Leu Ile Gly Asn His Ile Ser Lys Thr Leu Gln
     50                  55                  60
Gly Ser Ile Ala Leu His Val Pro His Val Leu Ala Glu Tyr Pro Asp
 65                  70                  75                  80
Phe Phe Ala Leu Gly Leu Val Leu Leu Leu Thr Gly Leu Leu Ala Leu
                 85                  90                  95
Gly Ala Ser Glu Ser Ala Leu Val Thr Lys Val Phe Thr Gly Val Asn
            100                 105                 110
Leu Leu Val Leu Gly Phe Val Met Ile Ser Gly Phe Val Lys Gly Asp
        115                 120                 125
Val His Asn Trp Lys Leu Thr Glu Glu Asp Tyr Glu Leu Ala Met Ala
    130                 135                 140
Glu Leu Asn Asp Thr Tyr Ser Leu Gly Pro Leu Gly Ser Gly Gly Phe
145                 150                 155                 160
Val Pro Phe Gly Phe Glu Gly Ile Leu Arg Gly Ala Ala Thr Cys Phe
                165                 170                 175
Tyr Ala Phe Val Gly Phe Asp Cys Ile Ala Thr Thr Gly Glu Glu Ala
            180                 185                 190
Gln Asn Pro Gln Arg Ser Ile Pro Met Gly Ile Gly Ile Ser Leu Ser
        195                 200                 205
Val Cys Phe Leu Ala Asp Phe Ala Val Ser Ser Ala Leu Thr Leu Met
    210                 215                 220
Met Pro Tyr Tyr Gln Leu Gln Pro Glu Ser Pro
225                 230                 235
```

<210> 944
<211> 284
<212>Amino acid
<213> Homo sapiens

<400> 944

```
Gly Phe His Pro Asn Thr Thr His Tyr Arg Ala Arg Ala Ala Ala Arg
 1               5                  10                  15
Ala Gly Ala Gly Ser Phe Val Gly Glu Val Ser Ala Val Asp Lys Asp
            20                  25                  30
Phe Gly Pro Asn Gly Glu Val Arg Tyr Ser Phe Glu Met Val Gln Pro
        35                  40                  45
Asp Phe Glu Leu His Ala Ile Ser Gly Glu Ile Thr Asn Thr His Gln
    50                  55                  60
Phe Asp Arg Glu Ser Leu Met Arg Arg Arg Gly Thr Ala Val Phe Ser
65                  70                  75                  80
Phe Thr Val Ile Ala Thr Asp Gln Gly Ile Pro Gln Pro Leu Lys Asp
                85                  90                  95
Gln Ala Thr Val His Val Tyr Met Lys Asp Ile Asn Asp Asn Ala Pro
            100                 105                 110
Lys Phe Leu Lys Asp Phe Tyr Gln Ala Thr Ile Ser Glu Ser Ala Ala
        115                 120                 125
Asn Leu Thr Gln Val Leu Arg Val Ser Ala Ser Asp Val Asp Glu Gly
    130                 135                 140
Asn Asn Gly Leu Ile His Tyr Ser Ile Ile Lys Gly Asn Glu Glu Arg
145                 150                 155                 160
Gln Phe Ala Ile Asp Ser Thr Ser Gly Gln Val Thr Leu Ile Gly Lys
                165                 170                 175
Leu Asp Tyr Glu Ala Thr Pro Ala Tyr Ser Leu Val Ile Gln Ala Val
            180                 185                 190
Asp Ser Gly Thr Ile Pro Leu Asn Ser Thr Cys Thr Leu Asn Ile Asp
        195                 200                 205
Ile Leu Asp Glu Asn Asp Asn Thr Pro Phe Phe Leu Leu Asn Gln His
    210                 215                 220
Phe Phe Val Asp Val Leu Glu Asn Met Arg Ile Gly Glu Leu Gly Ala
225                 230                 235                 240
Ser Gly Thr Ala Thr Asp Ser Asp Ser Gly Asp Ile Ala Asp Leu Tyr
                245                 250                 255
Tyr Lys Phe Thr Gly Thr Lys His Pro Pro Gly Thr Phe Ser Ile Ser
            260                 265                 270
Pro Lys His Leu Gly Val Phe Phe Leu Ala Gln Lys
        275                 280                 284
```

<210> 945
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 945

```
Gly Asp Cys Tyr Asp Leu Tyr Gly Gly Glu Lys Phe Ala Thr Leu Ala
 1               5                  10                  15
Glu Leu Val Gln Tyr Tyr Met Glu His His Gly Gln Leu Lys Glu Lys
            20                  25                  30
Asn Gly Asp Val Ile Glu Leu Lys Asn Pro Leu Asn Cys Ala Asp Pro
        35                  40                  45
Thr Ser Gln Arg Trp Phe His Gly His Leu Ser Gly Lys Glu Ala Glu
    50                  55                  60
Lys Leu Leu Thr Glu Lys Gly Lys His Ser Ser Phe Leu Val Arg Glu
65                  70                  75                  80
Ser Gln Ser His Pro Gly Asp Phe Val Leu Ser Val Cys Thr Gly Asp
                85                  90                  95
Asp Lys Gly Glu Ser Asn Asp Gly Lys Ser Lys Val Thr His Val Met
```

```
            100                 105                 110
Ile His Cys Gln Glu Leu Lys
        115             119
```

<210> 946
<211> 166
<212>Amino acid
<213> Homo sapiens

<400> 946

```
Ile Asp Ser Gly Asn Gln Asn Gly Gly Asn Asp Asp Lys Thr Lys Asn
  1               5                  10                  15
Ala Glu Arg Asn Tyr Leu Asn Val Leu Pro Gly Glu Phe Tyr Ile Thr
             20                  25                  30
Arg His Ser Asn Leu Ser Glu Ile His Val Ala Phe His Leu Cys Val
         35                  40                  45
Asp Asp His Val Lys Ser Gly Asn Ile Thr Ala Arg Asp Pro Ala Ile
     50                  55                  60
Met Gly Leu Arg Asn Ile Leu Lys Val Cys Cys Thr His Asp Ile Thr
 65                  70                  75                  80
Thr Ile Ser Ile Pro Leu Leu Leu Val His Asp Met Ser Glu Glu Met
                 85                  90                  95
Thr Ile Pro Trp Cys Leu Arg Arg Ala Glu Leu Val Phe Lys Cys Val
            100                 105                 110
Lys Gly Phe Met Met Glu Met Ala Ser Trp Asp Gly Gly Ile Ser Arg
        115                 120                 125
Thr Val Gln Phe Leu Val Pro Gln Ser Ile Ser Glu Glu Met Phe Tyr
    130                 135                 140
Gln Leu Ser Asn Met Leu Pro Gln Ile Phe Arg Val Ser Ser Thr Leu
145                 150                 155                 160
Thr Leu Thr Ser Lys His
                165 166
```

<210> 947
<211> 121
<212>Amino acid
<213> Homo sapiens

<400> 947

```
Ser Ile Leu Pro Ala Leu Leu Val Thr Ile Leu Ile Phe Met Asp Gln
  1               5                  10                  15
Gln Ile Thr Ala Val Ile Val Asn Arg Lys Glu Asn Lys Leu Lys Lys
             20                  25                  30
Ala Ala Gly Tyr His Leu Asp Leu Phe Trp Val Gly Ile Leu Met Ala
         35                  40                  45
Leu Cys Ser Phe Met Gly Leu Pro Trp Tyr Val Ala Ala Thr Val Ile
     50                  55                  60
Ser Ile Ala His Ile Asp Ser Leu Lys Met Glu Thr Glu Thr Ser Ala
 65                  70                  75                  80
Pro Gly Glu Gln Pro Gln Phe Leu Gly Val Arg Glu Gln Arg Val Thr
                 85                  90                  95
Gly Ile Ile Val Phe Ile Leu Thr Gly Ile Ser Val Phe Leu Ala Pro
            100                 105                 110
Ile Leu Lys Cys Ile Pro Leu Pro Val
```

115 120 121

<210> 948
<211> 191
<212>Amino acid
<213> Homo sapiens

<400> 948

```
Gly Ala Ser Arg Val Glu Ala Gly Ser Ala Asn Gly Met Leu Ile Asp
  1               5                  10                  15
Gly Gly Ser Gln Ile Val Lys Val Gln Gly His Ala Asp Gly Thr Thr
            20                  25                  30
Ile Asn Lys Ser Gly Ser Gln Asp Val Val Gln Gly Ser Leu Ala Thr
        35                  40                  45
Asn Thr Thr Ile Asn Gly Gly Arg Gln Tyr Val Glu Gln Ser Thr Val
    50                  55                  60
Glu Thr Thr Thr Ile Lys Asn Gly Gly Glu Gln Arg Val Tyr Glu Ser
65                  70                  75                  80
Arg Ala Leu Asp Thr Thr Ile Glu Gly Gly Thr Gln Ser Leu Asn Ser
                85                  90                  95
Lys Ser Thr Ala Lys Asn Thr His Ile Tyr Ser Gly Gly Thr Gln Ile
            100                 105                 110
Val Asp Asn Thr Ser Thr Ser Asp Val Ile Glu Val Tyr Ser Gly Gly
        115                 120                 125
Val Leu Asp Val Arg Gly Gly Thr Ala Thr Asn Val Thr Gln His Asp
    130                 135                 140
Gly Ala Ile Leu Lys Thr Asn Thr Asn Gly Thr Thr Val Ser Gly Thr
145                 150                 155                 160
Asn Ser Glu Gly Ala Phe Ser Ile His Asn His Val Ala Asp Asn Val
                165                 170                 175
Leu Leu Glu Asn Gly Gly His Leu Asp Ile Asn Ala Tyr Gly Ser
            180                 185                 190 191
```

<210> 949
<211> 98
<212>Amino acid
<213> Homo sapiens

<400> 949

```
Phe Phe Ser Ser Ile Gln Leu Thr Asp Asp Gln Gly Pro Val Leu Met
  1               5                  10                  15
Thr Thr Val Ala Met Pro Val Phe Ser Lys Gln Asn Glu Thr Arg Ser
            20                  25                  30
Lys Gly Ile Leu Leu Gly Val Val Gly Thr Asp Val Pro Val Lys Glu
        35                  40                  45
Leu Leu Lys Thr Ile Pro Lys Tyr Lys Val Met Asn Asp Leu Ile Pro
    50                  55                  60
Glu Ile Lys Ala Thr Glu Met Pro Arg Ala Leu Phe Ser Gln Ser Ser
65                  70                  75                  80
Gly Phe Lys Leu Tyr Phe Gly Ala Met Phe Leu Leu Thr Thr Ile Thr
                85                  90                  95
Ala Cys
    98
```

<210> 950
<211> 196
<212>Amino acid
<213> Homo sapiens

<400> 950

```
Ser Cys Ser Gly Thr Gly Thr Asn Ala Cys Tyr Met Glu Asp Met Ser
  1               5                  10                  15
Asn Ile Asp Leu Val Glu Gly Asp Glu Gly Arg Met Cys Ile Asn Thr
             20                  25                  30
Glu Trp Gly Ala Phe Gly Asp Asp Gly Ala Leu Glu Asp Ile Arg Thr
         35                  40                  45
Glu Phe Asp Arg Glu Leu Asp Leu Gly Ser Leu Asn Pro Gly Lys Gln
     50                  55                  60
Leu Phe Glu Lys Met Ile Ser Gly Leu Tyr Leu Gly Glu Leu Val Arg
 65                  70                  75                  80
Leu Ile Leu Leu Lys Met Ala Lys Ala Gly Leu Leu Phe Gly Gly Glu
                 85                  90                  95
Lys Ser Ser Ala Leu His Thr Lys Gly Lys Ile Glu Thr Arg His Val
            100                 105                 110
Ala Ala Met Glu Lys Tyr Lys Glu Gly Leu Ala Asn Thr Arg Glu Ile
        115                 120                 125
Leu Val Asp Leu Gly Leu Glu Pro Ser Glu Ala Asp Cys Ile Ala Val
    130                 135                 140
Gln His Val Cys Thr Ile Val Ser Phe Arg Ser Ala Asn Leu Cys Ala
145                 150                 155                 160
Ala Ala Leu Ala Ala Ile Leu Thr Arg Leu Arg Glu Asn Lys Lys Val
                165                 170                 175
Glu Arg Leu Arg Thr Thr Val Gly Met Asp Gly Thr Leu Tyr Lys Ile
            180                 185                 190
His Pro Gln Tyr
        195 196
```

<210> 951
<211> 721
<212>Amino acid
<213> Homo sapiens

<400> 951

```
Phe Val Ala Ile Ala Thr Asn Gly Val Val Pro Ala Gly Gly Ser Tyr
  1               5                  10                  15
Tyr Met Ile Ser Arg Ser Leu Gly Pro Glu Phe Gly Gly Ala Val Gly
             20                  25                  30
Leu Cys Phe Tyr Leu Gly Thr Thr Phe Ala Gly Ala Met Tyr Ile Leu
         35                  40                  45
Gly Thr Ile Glu Ile Leu Leu Ala Tyr Leu Phe Pro Ala Met Ala Ile
     50                  55                  60
Phe Lys Ala Glu Asp Ala Ser Gly Glu Ala Ala Ala Met Leu Asn Asn
 65                  70                  75                  80
Met Arg Val Tyr Gly Thr Cys Val Leu Thr Cys Met Ala Thr Val Val
                 85                  90                  95
Phe Val Gly Val Lys Tyr Val Asn Lys Phe Ala Leu Val Phe Leu Gly
            100                 105                 110
Cys Val Ile Leu Ser Ile Leu Ala Ile Tyr Ala Gly Val Ile Lys Ser
```

```
        115                 120                 125
Ala Phe Asp Pro Pro Asn Phe Pro Ile Cys Leu Leu Gly Asn Arg Thr
    130                 135                 140
Leu Ser Arg His Gly Phe Asp Val Cys Ala Lys Leu Ala Trp Glu Gly
145                 150                 155                 160
Asn Glu Thr Val Thr Thr Arg Leu Trp Gly Leu Phe Cys Ser Ser Arg
                165                 170                 175
Phe Leu Asn Ala Thr Cys Asp Glu Tyr Phe Thr Arg Asn Asn Val Thr
            180                 185                 190
Glu Ile Gln Gly Ile Pro Gly Ala Ala Ser Gly Leu Ile Lys Glu Asn
        195                 200                 205
Leu Trp Ser Ser Tyr Leu Thr Lys Gly Val Ile Val Glu Arg Ser Gly
    210                 215                 220
Met Thr Ser Val Gly Leu Ala Asp Gly Thr Pro Ile Asp Met Asp His
225                 230                 235                 240
Pro Tyr Val Phe Ser Asp Met Thr Ser Tyr Phe Thr Leu Leu Val Gly
                245                 250                 255
Ile Tyr Phe Pro Ser Val Thr Gly Ile Met Ala Gly Ser Asn Arg Ser
            260                 265                 270
Gly Asp Leu Arg Asp Ala Gln Lys Ser Ile Pro Thr Gly Thr Ile Leu
        275                 280                 285
Ala Ile Ala Thr Thr Ser Ala Val Tyr Ile Ser Ser Val Val Leu Phe
    290                 295                 300
Gly Ala Cys Ile Glu Gly Val Val Leu Arg Asp Lys Phe Gly Glu Ala
305                 310                 315                 320
Val Asn Gly Asn Leu Val Val Gly Thr Leu Ala Trp Pro Ser Pro Trp
                325                 330                 335
Val Ile Val Ile Gly Ser Phe Phe Ser Thr Cys Gly Ala Gly Leu Gln
            340                 345                 350
Ser Leu Thr Gly Ala Pro Arg Leu Leu Gln Ala Ile Ser Arg Asp Gly
        355                 360                 365
Ile Val Pro Phe Leu Gln Val Phe Gly His Gly Lys Ala Asn Gly Glu
    370                 375                 380
Pro Thr Trp Ala Leu Leu Leu Thr Ala Cys Ile Cys Glu Ile Gly Ile
385                 390                 395                 400
Leu Ile Ala Ser Leu Asp Glu Val Ala Pro Ile Leu Ser Met Phe Phe
                405                 410                 415
Leu Met Cys Tyr Met Phe Val Asn Leu Ala Cys Ala Val Gln Thr Leu
            420                 425                 430
Leu Arg Thr Pro Asn Trp Arg Pro Arg Phe Arg Tyr Tyr His Trp Thr
        435                 440                 445
Leu Ser Phe Leu Gly Met Ser Leu Cys Leu Ala Leu Met Phe Ile Cys
    450                 455                 460
Ser Trp Tyr Tyr Ala Leu Val Ala Met Leu Ile Ala Gly Leu Ile Tyr
465                 470                 475                 480
Lys Tyr Ile Glu Tyr Arg Gly Ala Lys Lys Glu Trp Gly Asp Gly Ile
                485                 490                 495
Arg Gly Leu Ser Leu Ser Ala Ala Arg Tyr Ala Leu Leu Arg Leu Glu
            500                 505                 510
Glu Gly Pro Pro His Thr Lys Asn Trp Arg Pro Gln Leu Leu Val Leu
        515                 520                 525
Val Arg Val Asp Gln Asp Gln Asn Val Val His Pro Gln Leu Leu Ser
    530                 535                 540
Leu Thr Ser Gln Leu Lys Ala Gly Lys Gly Leu Thr Ile Val Gly Ser
545                 550                 555                 560
Val Leu Glu Gly Thr Phe Leu Glu Asn His Pro Gln Ala Gln Arg Ala
                565                 570                 575
Glu Glu Ser Ile Arg Arg Leu Met Glu Ala Glu Lys Val Lys Gly Phe
            580                 585                 590
Cys Gln Val Val Ile Ser Ser Asn Leu Arg Asp Gly Val Ser His Leu
        595                 600                 605
Ile Gln Ser Gly Gly Leu Gly Gly Leu Gln His Asn Thr Val Leu Val
    610                 615                 620
Gly Trp Pro Arg Asn Trp Arg Gln Lys Glu Asp His Gln Thr Trp Arg
```

625 630 635 640
Asn Phe Ile Glu Leu Val Arg Glu Thr Thr Ala Gly His Leu Ala Leu
645 650 655
Leu Val Thr Lys Asn Val Ser Met Phe Pro Gly Asn Pro Glu Arg Phe
660 665 670
Ser Glu Gly Ser Ile Asp Arg Trp Gly Ile Gly His Asp Gly Gly Met
675 680 685
Leu Met Leu Val Pro Phe Leu Leu Arg His His Lys Val Trp Arg Lys
690 695 700
Cys Lys Met Arg Ile Phe Thr Val Ala Gln Met Val Asp Met His Ala
705 710 715 720
Met
721

<210> 952
<211> 42
<212>Amino acid
<213> Homo sapiens

<400> 952
Phe Tyr Leu Arg Leu Leu Ser Phe Phe Cys Phe Gln Glu His Glu Lys
1 5 10 15
Arg Cys Trp Ser Val Asp Phe Asn Leu Met Asp Pro Lys Leu Leu Ala
20 25 30
Ser Gly Ser Asp Asp Ala Lys Gly Thr Val
35 40 42

<210> 953
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 953
Arg Asn Ser Lys Ala Met His Arg Ser Ser Cys Asp Gly Pro Leu Leu
1 5 10 15
Ser Leu Pro Ser Val Gly Arg Ser Ala Thr His Ala Leu Val Gln Ala
20 25 30
Gln Leu Ile Cys Ser Gly Ala Arg Arg Gly Met His Ala Phe Ile Val
35 40 45
Pro Ile Arg Ser Leu Gln Asp His Thr Pro Leu Pro Gly Lys Pro Ile
50 55 60
Met Leu Pro Gln Gly Thr Leu Pro Gly Gly Glu Pro Arg Trp Pro Pro
65 70 75 80

<210> 954
<211> 202
<212>Amino acid
<213> Homo sapiens

<400> 954

```
Cys Gly Thr Leu Ile Leu Gln Ala Arg Ala Tyr Val Gly Pro His Val
 1               5                  10                  15
Leu Ala Val Val Thr Arg Thr Gly Phe Cys Thr Ala Lys Gly Gly Leu
            20                  25                  30
Val Ser Ser Ile Leu His Pro Arg Pro Ile Asn Phe Lys Phe Tyr Lys
        35                  40                  45
His Ser Met Lys Phe Val Ala Ala Leu Ser Val Leu Ala Leu Leu Gly
    50                  55                  60
Thr Ile Tyr Ser Ile Phe Ile Leu Tyr Arg Asn Arg Val Pro Leu Asn
65                  70                  75                  80
Glu Ile Val Ile Arg Ala Leu Asp Leu Val Thr Val Val Val Pro Pro
                85                  90                  95
Ala Leu Pro Ala Ala Met Thr Val Cys Thr Leu Tyr Ala Gln Ser Arg
            100                 105                 110
Leu Arg Arg Gln Gly Ile Phe Cys Ile His Pro Leu Arg Ile Asn Leu
        115                 120                 125
Gly Gly Lys Leu Gln Leu Val Cys Phe Asp Lys Thr Gly Thr Leu Thr
    130                 135                 140
Glu Asp Gly Leu Asp Val Met Gly Val Val Pro Leu Lys Gly Gln Ala
145                 150                 155                 160
Phe Leu Pro Leu Val Pro Glu Pro Arg Arg Leu Pro Val Gly Pro Leu
                165                 170                 175
Leu Arg Ala Leu Ala Thr Cys His Ala Leu Ser Arg Leu Gln Asp Thr
            180                 185                 190
Pro Val Gly Asp Pro Met Asp Leu Lys Met
        195                 200     202
```

<210> 955
<211> 188
<212>Amino acid
<213> Homo sapiens

<400> 955

```
Gln Ile Glu Tyr Phe Arg Ser Leu Leu Asp Glu His His Ile Ser Tyr
 1               5                  10                  15
Val Ile Asp Glu Asp Val Lys Ser Gly Arg Tyr Met Glu Leu Glu Gln
            20                  25                  30
Arg Tyr Met Asp Leu Ala Glu Asn Ala Arg Phe Glu Arg Glu Gln Leu
        35                  40                  45
Leu Gly Val Gln Gln His Leu Ser Asn Thr Leu Lys Met Ala Glu Gln
    50                  55                  60
Asp Asn Lys Glu Ala Gln Glu Met Ile Gly Ala Leu Lys Glu Arg Ser
65                  70                  75                  80
His His Met Glu Arg Ile Ile Glu Ser Glu Gln Lys Gly Lys Ala Ala
                85                  90                  95
Leu Ala Ala Thr Leu Glu Glu Tyr Lys Ala Thr Val Ala Ser Asp Gln
            100                 105                 110
Ile Glu Met Asn Arg Leu Lys Ala Gln Leu Glu Asn Glu Lys Gln Lys
        115                 120                 125
Val Ala Glu Leu Tyr Ser Ile His Asn Ser Gly Asp Lys Ser Asp Ile
    130                 135                 140
Gln Asp Leu Leu Glu Ser Val Arg Leu Asp Lys Glu Lys Ala Glu Thr
145                 150                 155                 160
Leu Ala Ser Ser Leu Gln Glu Asp Leu Ala His Thr Arg Asn Asp Ala
                165                 170                 175
Asn Arg Leu Gln Asp Ala Ile Ala Lys Gly Arg Gly
```

180 185 188

<210> 956
<211> 132
<212>Amino acid
<213> Homo sapiens

<400> 956

```
Ala Arg Tyr Arg Phe Thr Leu Ser Ala Arg Thr Gln Val Gly Ser Gly
 1               5                  10                  15
Glu Ala Val Thr Glu Glu Ser Pro Ala Pro Pro Asn Glu Ala Thr Pro
            20                  25                  30
Thr Ala Ala Pro Pro Thr Leu Pro Pro Thr Thr Val Gly Ala Thr Gly
        35                  40                  45
Ala Val Ser Ser Thr Asp Ala Thr Ala Ile Ala Ala Thr Thr Glu Ala
    50                  55                  60
Thr Thr Val Pro Ile Ile Pro Thr Val Ala Pro Thr Thr Met Ala Thr
65                  70                  75                  80
Thr Thr Thr Val Ala Thr Thr Thr Thr Thr Ala Ala Ala Thr Thr
                85                  90                  95
Thr Thr Glu Ser Pro Pro Thr Thr Thr Ser Gly Thr Lys Ile His Glu
            100                 105                 110
Ser Ala Pro Asp Glu Gln Ser Ile Trp Asn Val Thr Val Leu Pro Asn
        115                 120                 125
Ser Lys Trp Ala
    130     132
```

<210> 957
<211> 220
<212>Amino acid
<213> Homo sapiens

<400> 957

```
Leu Lys Ser Thr Gln Asp Glu Ile Asn Gln Ala Arg Ser Lys Leu Ser
 1               5                  10                  15
Gln Leu His Glu Ser Arg Gln Glu Ala His Arg Ser Leu Glu Gln Tyr
            20                  25                  30
Asp Gln Val Leu Asp Gly Ala His Gly Ala Ser Leu Thr Asp Leu Ala
        35                  40                  45
Asn Leu Ser Glu Gly Val Ser Leu Ala Glu Arg Gly Ser Phe Gly Ala
    50                  55                  60
Met Asp Asp Pro Phe Lys Asn Lys Ala Leu Leu Phe Ser Asn Asn Thr
65                  70                  75                  80
Gln Glu Leu His Pro Asp Pro Phe Gln Thr Glu Asp Pro Phe Lys Ser
                85                  90                  95
Asp Pro Phe Lys Gly Ala Asp Pro Phe Lys Gly Asp Pro Phe Gln Asn
            100                 105                 110
Asp Pro Phe Ala Glu Gln Gln Thr Thr Ser Thr Asp Pro Phe Gly Gly
        115                 120                 125
Asp Pro Phe Lys Glu Ser Asp Pro Phe Arg Gly Ser Ala Thr Asp Asp
    130                 135                 140
Phe Phe Lys Lys Gln Thr Lys Asn Asp Pro Phe Thr Ser Asp Pro Phe
145                 150                 155                 160
Thr Lys Asn Pro Ser Leu Pro Ser Lys Leu Asp Pro Phe Glu Ser Ser
```

```
                165                 170                 175
Asp Pro Phe Ser Ser Ser Ser Val Ser Ser Lys Gly Ser Asp Pro Phe
            180                 185                 190
Gly Thr Leu Asp Pro Phe Gly Ser Gly Ser Phe Asn Ser Ala Glu Gly
        195                 200                 205
Phe Ala Asp Phe Ser Thr Ile Glu Gly Arg Arg Gly
    210                 215                 220
```

<210> 958
<211> 250
<212>Amino acid
<213> Homo sapiens

<400> 958

```
Arg Thr Arg Gly Gly Ser Gly Asn Ser Ser Gln Pro Ser Leu Arg Glu
  1               5                  10                  15
Gly His Asp Lys Pro Val Phe Asn Gly Ala Gly Lys Pro His Ser Ser
             20                  25                  30
Thr Ser Ser Pro Ser Val Pro Lys Thr Ser Ala Ser Arg Thr Gln Lys
         35                  40                  45
Ser Ala Val Glu His Lys Ala Lys Lys Ser Leu Ser His Pro Ser His
     50                  55                  60
Ser Arg Pro Gly Pro Met Val Thr Pro His Asn Lys Ala Lys Ser Pro
 65                  70                  75                  80
Gly Val Arg Gln Pro Gly Ser Ser Ser Ser Ser Ala Pro Gly Gln Pro
                 85                  90                  95
Ser Thr Gly Val Ala Arg Pro Thr Val Ser Ser Gly Pro Val Pro Arg
            100                 105                 110
Arg Gln Asn Gly Ser Ser Ser Ser Gly Pro Glu Arg Ser Ile Ser Gly
        115                 120                 125
Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro Ser Arg Arg Thr Val Ser
    130                 135                 140
Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser Ser Ser Gly Gly Pro Gly
145                 150                 155                 160
Arg Pro Ile Ser Gly Ser Val Ser Ser Ala Arg Pro Leu Gly Ser Ser
                165                 170                 175
Arg Gly Pro Gly Arg Pro Val Ser Ser Pro His Glu Leu Arg Arg Pro
            180                 185                 190
Val Ser Gly Leu Gly Pro Pro Gly Arg Ser Val Ser Gly Pro Gly Arg
        195                 200                 205
Ser Ile Ser Gly Ser Ile Pro Ala Gly Arg Thr Val Ser Asn Ser Val
    210                 215                 220
Pro Gly Arg Pro Val Ser Ser Leu Gly Pro Gly Gln Thr Val Ser Ser
225                 230                 235                 240
Ser Gly Pro Thr Ile Lys Pro Lys Cys Thr
                245                 250
```

<210> 959
<211> 48
<212>Amino acid
<213> Homo sapiens

<400> 959

```
Arg Gly Lys Gly Ile Thr Pro Arg Tyr His Leu Cys Ile Ser Asp Pro
```

```
  1               5                  10                  15
His Asn Leu Lys Ile Cys Cys Arg Val Asn Gly Glu Val Val Gln Ser
            20                  25                  30
Ser Asn Thr Asn Gln Met Val Phe Lys Thr Glu Asp Leu Ile Ala Trp
        35                  40                  45          48
```

<210> 960
<211> 63
<212>Amino acid
<213> Homo sapiens

<400> 960

```
Val Val Ala Val Thr Arg Trp Leu Cys Glu Asn Gly Val Ser Tyr Leu
  1               5                  10                  15
Arg Lys Cys Val Cys Ser Ala Cys Arg His Gly Thr Arg Cys Ala Gly
            20                  25                  30
Glu Val Ala Ala Ala Ala Asn Asn Ser His Cys Thr Val Gly Ile Ala
        35                  40                  45
Phe Asn Ala Lys Ile Gly Gly Met Gly Asn Gln Leu Thr Trp Met
    50                  55                  60          63
```

<210> 961
<211> 59
<212>Amino acid
<213> Homo sapiens

<400> 961

```
Gly Ala Pro Pro Pro Phe Val Pro Thr Leu Lys Ser Asp Asp Asp Thr
  1               5                  10                  15
Ser Asn Phe Asp Glu Pro Lys Lys Asn Ser Trp Val Ser Ser Ser Pro
            20                  25                  30
Cys Gln Leu Ser Pro Ser Gly Phe Ser Gly Glu Glu Leu Pro Phe Val
        35                  40                  45
Gly Phe Ser Tyr Ser Lys Ala Leu Gly Ile Leu
    50                  55              59
```

<210> 962
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 962

```
Phe Val Glu Arg Leu Ala His Leu His Ala Ala Cys Ala Pro Arg Arg
  1               5                  10                  15
Lys Val Ala Leu Leu Leu Glu Val Cys Arg Asp Val Tyr Ala Gly Leu
            20                  25                  30
Ala Arg Gly Glu Asn Gln Asp Pro Leu Gly Ala Asp Ala Phe Leu Pro
```

```
         35                  40                  45
Ala Leu Thr Glu Glu Leu Ile Trp Ser Pro Asp Ile Gly Asp Thr Gln
     50                  55                  60
Leu Asp Val Glu Phe Leu Met Glu Leu Leu Asp Pro Asp Glu Leu Arg
 65                  70                  75                  80
Gly Glu Ala Gly Tyr Tyr Leu Thr Thr Trp Phe Gly Ala Leu His His
                 85                  90                  95
Ile Ala His Tyr Gln Pro Glu Thr Asp Arg Ala Pro Arg Gly Leu Ser
            100                 105                 110
Ser Glu Ala Arg Ala Ser Leu His Gln Trp His Arg Arg Arg Thr Leu
        115                 120                 125
His Arg Lys Asp His Pro Arg Ala Gln Gln Leu Asp
    130                 135                 140
```

<210> 963
<211> 153
<212>Amino acid
<213> Homo sapiens

<400> 963

```
Phe Trp Met Asp Pro Tyr Asn Pro Leu Asn Phe Lys Ala Pro Phe Gln
  1               5                  10                  15
Thr Ser Gly Glu Asn Glu Lys Gly Cys Arg Asp Ser Lys Thr Pro Ser
            20                  25                  30
Glu Ser Ile Val Ala Ile Ser Glu Cys His Thr Leu Leu Ser Cys Lys
        35                  40                  45
Val Gln Leu Leu Gly Ser Gln Glu Ser Glu Cys Pro Asp Ser Val Gln
    50                  55                  60
Arg Asp Val Leu Ser Gly Gly Arg His Thr His Val Lys Arg Lys Lys
 65                  70                  75                  80
Val Thr Phe Leu Glu Glu Val Thr Glu Tyr Tyr Ile Ser Gly Asp Glu
                 85                  90                  95
Asp Arg Lys Gly Pro Trp Glu Glu Phe Ala Arg Asp Gly Cys Arg Phe
            100                 105                 110
Gln Lys Arg Ile Gln Glu Thr Glu Asp Ala Ile Gly Tyr Cys Leu Thr
        115                 120                 125
Phe Glu His Arg Glu Arg Met Phe Asn Arg Leu Gln Gly Thr Cys Phe
    130                 135                 140
Lys Gly Leu Asn Val Leu Lys Gln Cys
145                 150         153
```

<210> 964
<211> 54
<212>Amino acid
<213> Homo sapiens

<400> 964

```
Ala Ala Ser Thr Ala Tyr Ser Phe Phe Gly Thr Val Glu Asn Met Ala
  1               5                  10                  15
Pro Lys Val Val Asn Arg Pro Gly His Thr Gln Ser Ala Asp Trp Gly
            20                  25                  30
Ser Phe Gly Gly Leu Met Gly Arg Phe Glu Phe Gly Ile Phe Leu Lys
        35                  40                  45
Gly Lys Glu Ile Val Lys
```

50 54

<210> 965
<211> 39
<212>Amino acid
<213> Homo sapiens

<400> 965
Gly Phe Val Phe Leu Pro Gly Pro Met Ser Val Gly Leu Asp Phe Ser
1 5 10 15
Leu Pro Gly Met Glu His Val Tyr Gly Ile Pro Glu His Ala Asp Asn
20 25 30
Leu Arg Leu Lys Val Thr Glu
35 39

<210> 966
<211> 130
<212>Amino acid
<213> Homo sapiens

<400> 966
Gly Ser Glu Cys Gln Gly Thr Asp Leu Asp Thr Arg Asn Cys Thr Ser
1 5 10 15
Asp Leu Cys Val His Thr Ala Ser Gly Pro Glu Asp Val Ala Leu Tyr
20 25 30
Val Gly Leu Ile Ala Val Ala Val Cys Leu Val Leu Leu Leu Leu Val
35 40 45
Leu Ile Leu Val Tyr Cys Arg Lys Lys Glu Gly Leu Asp Ser Asp Val
50 55 60
Ala Asp Ser Ser Ile Leu Thr Ser Gly Phe Gln Pro Val Ser Ile Lys
65 70 75 80
Pro Ser Lys Ala Asp Asn Pro His Leu Leu Thr Ile Gln Pro Asp Leu
85 90 95
Ser Thr Thr Thr Thr Thr Tyr Gln Gly Ser Leu Cys Pro Arg Gln Asp
100 105 110
Gly Pro Ser Pro Lys Phe Gln Leu Thr Asn Gly His Leu Leu Ser Pro
115 120 125
Leu Gly
130

<210> 967
<211> 259
<212>Amino acid
<213> Homo sapiens

<400> 967
Leu Ile Tyr Asn Glu Asp Met Ile Cys Trp Ile Glu Ser Arg Glu Ser
1 5 10 15
Ser Asn Gln Leu Lys Cys Ile Gln Ile Thr Lys Ala Gly Gly Leu Thr

```
            20                  25                  30
Asp Glu Trp Thr Ile Asn Ile Leu Gln Ser Phe His Asn Val Gln Gln
        35                  40                  45
Met Ala Ile Asp Trp Leu Thr Arg Asn Leu Tyr Phe Val Asp His Val
    50                  55                  60
Gly Asp Arg Ile Phe Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr
65                  70                  75                  80
Leu Ile Asp Leu Glu Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro
                85                  90                  95
Ile Ala Gly Lys Leu Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val
            100                 105                 110
Glu Arg Cys Asp Met Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser
        115                 120                 125
Lys Thr Glu Gln Pro Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu
    130                 135                 140
Val Tyr Trp Val Asp Leu Tyr Leu Asp Tyr Val Gly Val Val Asp Tyr
145                 150                 155                 160
Gln Gly Lys Asn Arg His Ala Val Ile Gln Gly Arg Gln Val Arg His
                165                 170                 175
Leu Tyr Gly Ile Thr Val Phe Glu Asp Tyr Leu Tyr Ala Thr Asn Ser
            180                 185                 190
Asp Ser Tyr Asn Ile Val Arg Ile Ser Arg Phe Asn Gly Thr Asp Ile
        195                 200                 205
His Ser Leu Ile Lys Ile Glu Asn Ala Trp Gly Ile Arg Ile Tyr Gln
    210                 215                 220
Lys Arg Thr Gln Pro Thr Val Arg Ser His Ala Cys Glu Val Asp Pro
225                 230                 235                 240
Tyr Gly Met Pro Gly Gly Cys Ser His Ile Cys Leu Leu Ser Ser Ser
                245                 250                 255
Tyr Thr Lys
        259
```

<210> 968
<211> 161
<212>Amino acid
<213> Homo sapiens

<400> 968

```
Ser Ser Gly Asn Pro Gln Pro Gly Asp Ser Ser Gly Gly Gly Ala Gly
 1               5                  10                  15
Gly Gly Leu Pro Ser Pro Gly Glu Gln Glu Leu Ser Arg Arg Leu Gln
            20                  25                  30
Arg Leu Tyr Pro Ala Val Asn Gln Gln Glu Thr Pro Leu Pro Arg Ser
        35                  40                  45
Trp Ser Pro Lys Asp Lys Tyr Asn Tyr Ile Gly Leu Ser Gln Gly Asn
    50                  55                  60
Leu Arg Val His Tyr Lys Gly His Gly Lys Asn His Lys Asp Ala Ala
65                  70                  75                  80
Ser Val Arg Ala Thr His Pro Ile Pro Ala Ala Cys Gly Ile Tyr Tyr
                85                  90                  95
Phe Glu Val Lys Ile Val Ser Lys Gly Arg Asp Gly Tyr Met Gly Ile
            100                 105                 110
Gly Leu Ser Ala Gln Gly Val Asn Met Asn Arg Leu Pro Gly Trp Asp
        115                 120                 125
Lys His Ser Tyr Gly Tyr His Gly Asp Asp Gly His Ser Phe Cys Ser
    130                 135                 140
Ser Gly Thr Gly Gln Pro Tyr Gly Pro Thr Phe Thr Thr Gly Asp Val
145                 150                 155                 160
Ile
```

161

<210> 969
<211> 76
<212>Amino acid
<213> Homo sapiens

<400> 969

```
Phe Phe Phe Phe Lys Met Gly Ser Arg Ser Val Thr Gln Ala Gly Val
 1               5                  10                  15
Gln Trp Cys Asp Val Ser Ser Leu Gln Ala Pro Pro Pro Arg Phe Thr
            20                  25                  30
Leu Phe Cys Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Val Pro
        35                  40                  45
Pro Cys Pro Ala Asn Phe Phe Val Phe Leu Val Glu Thr Gly Phe His
    50                  55                  60
Arg Val Ser Gln Tyr Gly Leu Asp Leu Leu Thr Ser
65                  70                  75  76
```

<210> 970
<211> 267
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(267)
<223> X = any amino acid or stop code

<400> 970

```
Gln Leu Ser Leu Ala Arg Gly Lys Val Phe Leu Cys Ala Leu Ser Phe
 1               5                  10                  15
Val Tyr Phe Ala Lys Ala Leu Ala Glu Gly Tyr Leu Lys Ser Thr Ile
            20                  25                  30
Thr Gln Ile Glu Arg Arg Val Asp Ile Pro Ser Ser Leu Val Gly Val
        35                  40                  45
Ile Asp Gly Ser Phe Glu Ile Gly Asn Leu Leu Val Ile Thr Phe Val
    50                  55                  60
Ser Tyr Phe Gly Ala Lys Leu His Arg Pro Lys Ile Ile Gly Ala Gly
65                  70                  75                  80
Cys Val Ile Met Gly Val Gly Thr Leu Leu Ile Ala Met Pro Gln Phe
                85                  90                  95
Phe Met Glu Gln Tyr Lys Tyr Glu Arg Tyr Ser Pro Ser Ser Asn Ser
            100                 105                 110
Thr Leu Ser Ile Ser Pro Cys Leu Leu Glu Ser Ser Ser Gln Leu Pro
        115                 120                 125
Val Ser Val Met Glu Lys Ser Lys Ser Lys Ile Ser Asn Glu Cys Glu
    130                 135                 140
Val Asp Thr Ser Ser Ser Met Trp Ile Tyr Val Phe Leu Gly Asn Leu
145                 150                 155                 160
Leu Arg Gly Ile Gly Glu Thr Pro Ile Gln Pro Leu Gly Ile Ala Tyr
                165                 170                 175
Leu Asp Asp Phe Ala Ser Glu Asp Asn Ala Ala Phe Tyr Ile Gly Cys
            180                 185                 190
```

```
Val Gln Thr Val Ala Ile Ile Gly Pro Ile Phe Gly Phe Leu Leu Gly
       195                 200                 205
Ser Leu Cys Ala Lys Leu Tyr Val Asp Ile Gly Phe Val Asn Leu Asp
    210                 215                 220
His Phe Xaa Val Ser Ala Gln Leu Gly Thr Arg Lys Gly Val Leu Val
225                 230                 235                 240
Cys Leu Val Phe Cys Leu Leu Cys Gln Ser Ile Gly Arg Arg Leu Ser
                245                 250                 255
Glu Glu His His His Ser Asp Arg Glu Lys Gly
            260                 265     267
```

<210> 971
<211> 282
<212>Amino acid
<213> Homo sapiens

<400> 971

```
Gln Pro Ala Gly Arg Val Glu Ala Phe Cys Lys Phe His Met Trp Ala
  1                 5                  10                  15
Glu Gly Met Thr Ser Leu Met Lys Ala Ala Leu Asp Leu Thr Tyr Pro
             20                  25                  30
Ile Thr Ser Met Phe Ser Gly Ala Gly Phe Asn Ser Ser Ile Phe Ser
         35                  40                  45
Val Phe Lys Asp Gln Gln Ile Glu Asp Leu Trp Ile Pro Tyr Phe Ala
     50                  55                  60
Ile Thr Thr Asp Ile Thr Ala Ser Ala Met Arg Val His Thr Asp Gly
 65                  70                  75                  80
Ser Leu Trp Arg Tyr Val Arg Ala Ser Met Ser Leu Ser Gly Tyr Met
                85                  90                  95
Pro Pro Leu Cys Asp Pro Lys Asp Gly His Leu Leu Met Asp Gly Gly
            100                 105                 110
Tyr Ile Asn Asn Leu Pro Ala Asp Val Ala Arg Ser Met Gly Ala Lys
        115                 120                 125
Val Val Ile Ala Ile Asp Val Gly Ser Arg Asp Glu Thr Asp Leu Thr
    130                 135                 140
Asn Tyr Gly Asp Ala Leu Ser Gly Trp Trp Leu Leu Trp Lys Arg Trp
145                 150                 155                 160
Asn Pro Leu Ala Thr Lys Val Lys Val Leu Asn Met Ala Glu Ile Gln
                165                 170                 175
Thr Arg Leu Ala Tyr Val Cys Cys Val Arg Gln Leu Glu Val Val Lys
            180                 185                 190
Ser Ser Asp Tyr Cys Glu Tyr Leu Arg Pro Pro Ile Asp Ser Tyr Ser
        195                 200                 205
Thr Leu Asp Phe Gly Lys Phe Asn Glu Ile Cys Glu Val Gly Tyr Gln
    210                 215                 220
His Gly Arg Thr Val Phe Asp Ile Trp Gly Arg Ser Gly Val Leu Glu
225                 230                 235                 240
Lys Met Leu Arg Asp Gln Gln Gly Pro Ser Lys Lys Pro Ala Ser Ala
                245                 250                 255
Val Leu Thr Cys Pro Asn Ala Ser Phe Thr Asp Leu Ala Glu Ile Val
            260                 265                 270
Ser Arg Ile Glu Pro Ala Lys Pro Ala Met
        275                 280     282
```

<210> 972
<211> 167
<212>Amino acid
<213> Homo sapiens

<400> 972

```
Leu Trp Val Ile Met Phe Val Ser Tyr Leu Ile Leu Thr Leu Leu His
 1               5                  10                  15
Val Gln Thr Ala Val Leu Ala Arg Pro Gly Gly Glu Ser Ile Gly Cys
            20                  25                  30
Asp Asp Tyr Leu Gly Ser Asp Lys Val Val Asp Lys Cys Gly Val Cys
        35                  40                  45
Gly Gly Asp Asn Thr Gly Cys Gln Val Val Ser Gly Val Phe Lys His
    50                  55                  60
Ala Leu Thr Ser Leu Gly Tyr His Arg Val Val Glu Ile Pro Glu Gly
65                  70                  75                  80
Ala Thr Lys Ile Asn Ile Thr Glu Met Tyr Lys Ser Asn Asn Tyr Leu
                85                  90                  95
Ala Leu Arg Ser Arg Ser Gly Arg Ser Ile Ile Asn Gly Asn Trp Ala
            100                 105                 110
Ile Asp Arg Pro Gly Lys Tyr Glu Gly Gly Gly Thr Met Phe Thr Tyr
        115                 120                 125
Lys Arg Pro Asn Glu Ile Ser Ser Thr Ala Gly Glu Ser Phe Leu Ala
    130                 135                 140
Glu Gly Pro Thr Asn Glu Ile Leu Asp Val Tyr Val Ser Leu Asp Val
145                 150                 155                 160
Ser Gly Leu Phe Phe Gly Phe
                165     167
```

<210> 973
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 973

```
Ile Ser Gly Gly Thr Arg Ser Ala Gly Pro Leu Arg Arg Asn Tyr Asn
 1               5                  10                  15
Phe Ile Ala Ala Val Val Glu Lys Val Ala Pro Ser Val Val His Val
            20                  25                  30
Gln Leu Trp Gly Arg Asn Gln Gln Trp Ile Glu Val Val Leu Gln Asn
        35                  40                  45
Gly Ala Arg Tyr Glu Ala Val Val Lys Asp Ile Asp Leu Lys Leu Asp
    50                  55                  60
Leu Ala Val Ile Lys Ile Glu Ser Asn Ala Glu Leu Pro Val Leu Met
65                  70                  75                  80
Leu Gly Arg Ser Ser Asp Leu Arg Ala Gly Glu Phe Val Val Ala Leu
                85                  90                  95
Gly Ser Pro Phe Ser Leu Gln Asn Thr Ala Thr Ala Gly Ile Val Ser
            100                 105                 110
Thr Lys Gln Arg Gly Gly Lys Glu Leu Gly Met Lys Asp Ser Asp Met
        115                 120                 125
Asp Tyr Val Gln Ile Asp Ala Thr Ile Asn Tyr Gly
    130                 135                 140
```

<210> 974
<211> 286
<212>Amino acid
<213> Homo sapiens

<400> 974

```
Pro Arg Val Arg Glu Leu Lys Glu Ile Leu Asp Arg Lys Gly His Phe
 1               5                  10                  15
Ser Glu Asn Glu Thr Arg Trp Ile Ile Gln Ser Leu Ala Ser Ala Ile
            20                  25                  30
Ala Tyr Leu His Asn Asn Asp Ile Val His Arg Asp Leu Lys Leu Glu
        35                  40                  45
Asn Ile Met Val Lys Ser Ser Leu Ile Asp Asp Asn Asn Glu Ile Asn
    50                  55                  60
Leu Asn Ile Lys Val Thr Asp Phe Gly Leu Ala Val Lys Lys Gln Ser
65                  70                  75                  80
Arg Ser Glu Ala Met Leu Gln Ala Thr Cys Gly Thr Pro Ile Tyr Met
                85                  90                  95
Ala Pro Glu Val Ile Ser Ala His Asp Tyr Ser Gln Gln Cys Asp Ile
            100                 105                 110
Trp Ser Ile Gly Val Val Met Tyr Met Leu Leu Arg Gly Glu Pro Pro
        115                 120                 125
Phe Leu Ala Ser Ser Glu Glu Lys Leu Phe Glu Leu Ile Arg Lys Gly
    130                 135                 140
Glu Leu His Phe Glu Asn Ala Val Trp Asn Ser Ile Ser Asp Cys Ala
145                 150                 155                 160
Lys Ser Val Leu Lys Gln Leu Met Lys Val Asp Pro Ala His Arg Ile
                165                 170                 175
Thr Ala Lys Glu Leu Leu Asp Asn Gln Trp Leu Thr Gly Asn Lys Leu
            180                 185                 190
Ser Ser Val Arg Pro Thr Asn Val Leu Glu Met Met Lys Glu Trp Lys
        195                 200                 205
Asn Asn Pro Glu Ser Val Glu Glu Asn Thr Thr Glu Glu Lys Asn Lys
    210                 215                 220
Pro Ser Thr Glu Glu Lys Leu Lys Ser Tyr Gln Pro Trp Gly Asn Val
225                 230                 235                 240
Pro Glu Thr Asn Tyr Thr Ser Asp Glu Glu Glu Glu Lys Gln Val Gly
                245                 250                 255
Arg Ile Ile Ala Ala Phe Leu Pro Ser Val Lys Tyr Pro His His Thr
            260                 265                 270
Trp Asn Ile Phe Leu Gln Ile Cys Leu Phe Val Val Ser Leu
        275                 280                 285 286
```

<210> 975
<211> 155
<212>Amino acid
<213> Homo sapiens

<400> 975

```
Leu Ser Ile Ser Val Ser Asp Val Ser Leu Ser Asp Glu Gly Gln Tyr
 1               5                  10                  15
Thr Cys Ser Leu Phe Thr Met Pro Val Lys Thr Ser Lys Ala Tyr Leu
            20                  25                  30
Thr Val Leu Gly Val Pro Glu Lys Pro Gln Ile Ser Gly Phe Ser Ser
        35                  40                  45
Pro Val Met Glu Gly Asp Leu Met Gln Leu Thr Cys Lys Thr Ser Gly
    50                  55                  60
Ser Lys Pro Ala Ala Asp Ile Arg Trp Phe Lys Asn Asp Lys Glu Ile
65                  70                  75                  80
```

```
Lys Asp Val Lys Tyr Leu Lys Glu Glu Asp Ala Asn Arg Lys Thr Phe
                 85                  90                  95
Thr Val Ser Ser Thr Leu Asp Phe Arg Val Asp Arg Ser Asp Asp Gly
            100                 105                 110
Val Ala Val Ile Cys Arg Val Asp His Glu Ser Leu Asn Ala Thr Pro
        115                 120                 125
Gln Val Ala Met Gln Val Leu Glu Met His Tyr Thr Pro Ser Val Lys
    130                 135                 140
Ile Ile Pro Ser Thr Pro Phe Pro Gln Glu Gly
145                 150                 155
```

<210> 976
<211> 137
<212>Amino acid
<213> Homo sapiens

<400> 976

```
Tyr Asn Gln Lys Val Asp Leu Phe Ser Leu Gly Ile Ile Phe Phe Glu
  1                 5                  10                  15
Met Ser Tyr His Pro Met Val Thr Ala Ser Glu Arg Ile Phe Val Leu
             20                  25                  30
Asn Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp
         35                  40                  45
Asp Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn
     50                  55                  60
His Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu
 65                  70                  75                  80
Leu Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu
                 85                  90                  95
His His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Ile Asp
            100                 105                 110
Gly Pro Arg Ser Phe Arg Gln Arg Ile Ser Pro Ala Ile Ala Tyr Thr
        115                 120                 125
Tyr Asp Ser Asp Ile Leu Lys Gly Asn
    130                 135     137
```

<210> 977
<211> 246
<212>Amino acid
<213> Homo sapiens

<400> 977

```
Asp Gln Asp Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu
  1                 5                  10                  15
Asn Pro Pro Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe
             20                  25                  30
Glu Thr Lys Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp
         35                  40                  45
Trp Ser Leu Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln
     50                  55                  60
Lys Arg Thr Arg Ser Cys Gly Tyr Ala Cys Thr Ala Thr Glu Ser Arg
 65                  70                  75                  80
Thr Cys Asp Arg Pro Asn Cys Pro Gly Ile Glu Asp Thr Phe Arg Thr
                 85                  90                  95
```

```
Ala Ala Thr Glu Val Ser Leu Leu Ala Gly Ser Glu Glu Phe Asn Ala
            100                 105                 110
Thr Lys Leu Phe Glu Val Asp Thr Asp Ser Cys Glu Arg Trp Met Ser
        115                 120                 125
Cys Lys Ser Glu Phe Leu Lys Lys Tyr Met His Lys Val Met Asn Asp
    130                 135                 140
Leu Pro Ser Cys Pro Cys Ser Tyr Pro Thr Glu Val Ala Tyr Ser Thr
145                 150                 155                 160
Ala Asp Ile Phe Asp Arg Ile Lys Arg Lys Asp Phe Arg Trp Lys Asp
                165                 170                 175
Ala Ser Gly Pro Lys Glu Lys Leu Glu Ile Tyr Lys Pro Thr Ala Arg
            180                 185                 190
Tyr Cys Ile Arg Ser Met Leu Ser Leu Glu Ser Thr Thr Leu Ala Ala
        195                 200                 205
Gln His Cys Cys Tyr Gly Asp Asn Met Gln Leu Ile Thr Arg Gly Lys
    210                 215                 220
Gly Ala Gly Thr Pro Asn Leu Ile Ser Thr Glu Phe Ser Ala Glu Leu
225                 230                 235                 240
His Tyr Lys Val Asp Val
                245 246
```

<210> 978
<211> 203
<212>Amino acid
<213> Homo sapiens

<400> 978

```
Glu Ser Glu Glu Asn Gly Glu Ser Ala Met Asp Ser Thr Val Ala Lys
  1                 5                  10                  15
Glu Gly Thr Asn Val Pro Leu Val Ala Ala Gly Pro Cys Asp Asp Glu
             20                  25                  30
Gly Ile Val Thr Ser Thr Gly Ala Lys Glu Glu Asp Glu Glu Gly Glu
         35                  40                  45
Asp Val Val Thr Ser Thr Gly Arg Gly Asn Glu Ile Gly His Ala Ser
     50                  55                  60
Thr Cys Thr Gly Leu Gly Glu Glu Ser Glu Gly Val Leu Ile Cys Glu
 65                  70                  75                  80
Ser Ala Glu Gly Asp Ser Gln Ile Gly Thr Val Val Glu His Val Glu
                 85                  90                  95
Ala Glu Ala Gly Ala Ala Ile Met Asn Ala Asn Glu Asn Asn Val Asp
            100                 105                 110
Ser Met Ser Gly Thr Glu Lys Gly Ser Lys Asp Thr Asp Ile Cys Ser
        115                 120                 125
Ser Ala Lys Gly Ile Val Glu Ser Ser Val Thr Ser Ala Val Ser Gly
    130                 135                 140
Lys Asp Glu Val Thr Pro Val Pro Gly Gly Cys Glu Gly Pro Met Thr
145                 150                 155                 160
Ser Ala Ala Ser Asp Gln Ser Asp Ser Gln Leu Glu Lys Val Glu Asp
                165                 170                 175
Thr Thr Ile Ser Thr Gly Leu Val Gly Gly Ser Tyr Asp Val Leu Val
            180                 185                 190
Ser Gly Glu Val Pro Glu Cys Glu Val Ala His
        195                 200         203
```

<210> 979
<211> 94
<212>Amino acid
<213> Homo sapiens

<400> 979

```
Val Cys Ile Ile Cys Leu Ile Phe Ser Tyr Tyr Ser Phe Asp Ser Ala
 1               5                  10                  15
Leu Gln Ser Ala Lys Ser Ser Leu Gly Gly Asn Asp Glu Leu Ser Ala
            20                  25                  30
Thr Phe Leu Glu Met Lys Gly His Phe Tyr Met Tyr Ala Gly Ser Leu
        35                  40                  45
Leu Leu Lys Met Gly Gln His Gly Asn Asn Val Gln Trp Arg Ala Leu
    50                  55                  60
Ser Glu Leu Ala Ala Leu Cys Tyr Leu Ile Ala Phe Gln Val Ser Leu
65                  70                  75                  80
Pro Leu Gly Ala Ile Asp Ile Ser Arg Ser Leu Asp Val Phe
                85                  90                  94
```

<210> 980
<211> 226
<212>Amino acid
<213> Homo sapiens

<400> 980

```
Gln His Pro Ser Gln Glu Lys Pro Gln Val Leu Thr Pro Ser Pro Arg
 1               5                  10                  15
Lys Gln Lys Leu Asn Arg Lys Tyr Arg Ser His His Asp Gln Met Ile
            20                  25                  30
Cys Lys Cys Leu Ser Leu Ser Ile Ser Tyr Ser Ala Thr Ile Gly Gly
        35                  40                  45
Leu Thr Thr Ile Ile Gly Thr Ser Thr Ser Leu Ile Phe Leu Glu His
    50                  55                  60
Phe Asn Asn Gln Tyr Pro Ala Ser Glu Val Val Asn Phe Gly Thr Trp
65                  70                  75                  80
Phe Leu Phe Ser Phe Pro Ile Ser Leu Ile Met Leu Val Val Ser Trp
                85                  90                  95
Phe Trp Met His Trp Leu Phe Leu Gly Cys Asn Phe Lys Glu Thr Cys
            100                 105                 110
Ser Leu Ser Lys Lys Lys Lys Thr Lys Arg Glu Gln Leu Ser Glu Lys
        115                 120                 125
Arg Ile Gln Glu Glu Tyr Glu Lys Leu Gly Asp Ile Ser Tyr Pro Glu
    130                 135                 140
Met Val Thr Gly Phe Phe Phe Ile Leu Met Thr Val Leu Trp Phe Thr
145                 150                 155                 160
Arg Glu Pro Gly Phe Val Pro Gly Trp Asp Ser Phe Phe Glu Lys Lys
                165                 170                 175
Gly Tyr Arg Thr Asp Ala Thr Val Ser Val Phe Leu Gly Phe Leu Leu
            180                 185                 190
Phe Leu Ile Pro Ala Lys Lys Pro Cys Phe Gly Lys Lys Asn Asp Gly
        195                 200                 205
Glu Asn Gln Glu His Ser Leu Gly Thr Glu Pro Ile Ile Thr Trp Lys
    210                 215                 220
Asp Phe
225 226
```

<210> 981
<211> 163

<212>Amino acid
<213> Homo sapiens

<400> 981

```
Leu Glu Arg Glu Gly Asp Lys Gly Thr Pro Val Leu Arg Gly Phe Ser
 1               5                  10                  15
Ser Val Ser Gly Ser Trp Ser Arg Arg Met Pro Pro Phe Leu Leu Leu
            20                  25                  30
Thr Cys Leu Phe Ile Thr Gly Thr Ser Val Ser Pro Val Ala Leu Asp
        35                  40                  45
Pro Cys Ser Ala Tyr Ile Ser Leu Asn Glu Pro Trp Arg Asn Thr Asp
    50                  55                  60
His Gln Leu Asp Glu Ser Gln Gly Pro Pro Leu Cys Asp Asn His Val
65                  70                  75                  80
Asn Gly Glu Trp Tyr His Phe Thr Gly Met Ala Gly Asp Ala Met Pro
                85                  90                  95
Thr Phe Cys Ile Pro Glu Asn His Cys Gly Thr His Ala Pro Val Trp
            100                 105                 110
Leu Asn Gly Ser His Pro Leu Glu Gly Asp Gly Ile Val Gln Arg Gln
        115                 120                 125
Ala Cys Ala Ser Phe Asn Gly Asn Cys Cys Leu Trp Asn Thr Thr Val
    130                 135                 140
Glu Val Lys Ala Cys Pro Gly Gly Tyr Tyr Val Tyr Arg Leu Thr Lys
145                 150                 155                 160
Pro Ser Val
        163
```

<210> 982
<211> 327
<212>Amino acid
<213> Homo sapiens

<400> 982

```
Cys Gly Arg Thr Met Ser Asp Ile Arg His Ser Leu Leu Arg Arg Asp
 1               5                  10                  15
Ala Leu Ser Ala Ala Lys Glu Val Leu Tyr His Leu Asp Ile Tyr Phe
            20                  25                  30
Ser Ser Gln Leu Gln Ser Ala Pro Leu Pro Ile Val Asp Lys Gly Pro
        35                  40                  45
Val Glu Leu Leu Glu Glu Phe Val Phe Gln Val Pro Lys Glu Arg Ser
    50                  55                  60
Ala Gln Pro Lys Arg Leu Asn Ser Leu Gln Glu Leu Gln Leu Leu Glu
65                  70                  75                  80
Ile Met Cys Asn Tyr Phe Gln Glu Gln Thr Lys Asp Ser Val Arg Gln
                85                  90                  95
Ile Ile Phe Ser Ser Leu Phe Ser Pro Gln Gly Asn Lys Ala Asp Asp
            100                 105                 110
Ser Arg Met Ser Leu Leu Gly Lys Leu Val Ser Met Ala Val Ala Val
        115                 120                 125
Cys Arg Ile Pro Val Leu Glu Cys Ala Ala Ser Trp Leu Gln Arg Thr
    130                 135                 140
Pro Val Val Tyr Cys Val Arg Leu Ala Lys Ala Leu Val Asp Asp Tyr
145                 150                 155                 160
Cys Cys Leu Val Pro Gly Ser Ile Gln Thr Leu Lys Gln Ile Phe Ser
                165                 170                 175
```

```
Ala Ser Pro Arg Phe Cys Cys Gln Phe Ile Thr Ser Val Thr Ala Leu
            180                 185                 190
Tyr Asp Leu Ser Ser Asp Asp Leu Ile Pro Pro Met Asp Leu Leu Glu
        195                 200                 205
Met Ile Val Thr Trp Ile Phe Glu Asp Pro Arg Leu Ile Leu Ile Thr
    210                 215                 220
Phe Leu Asn Thr Pro Ile Ala Ala Asn Leu Pro Ile Gly Phe Leu Glu
225                 230                 235                 240
Leu Thr Pro Leu Val Gly Leu Ile Arg Trp Cys Val Lys Ala Pro Leu
                245                 250                 255
Ala Tyr Lys Arg Lys Lys Lys Pro Pro Leu Ser Asn Gly His Val Ser
            260                 265                 270
Asn Lys Val Thr Lys Asp Pro Gly Val Gly Met Asp Arg Asp Ser His
        275                 280                 285
Leu Leu Tyr Ser Lys Leu His Leu Ser Val Leu Gln Val Leu Met Thr
    290                 295                 300
Leu Gln Leu His Leu Thr Glu Lys Asn Leu Tyr Gly Pro Pro Gly Ala
305                 310                 315                 320
Asp Pro Leu Arg Pro His Gly
                325     327
```

<210> 983
<211> 110
<212>Amino acid
<213> Homo sapiens

<400> 983

```
Ser Ala Cys Ser Thr Gly Pro Glu Leu Pro Gly Arg Ala Thr Arg Ser
  1               5                  10                  15
Leu Thr Arg Pro Ala Asn Gln Lys Gly Cys Asp Gly Asp Arg Leu Tyr
             20                  25                  30
Tyr Asp Gly Cys Ala Met Ile Ala Met Asn Gly Ser Val Phe Ala Gln
         35                  40                  45
Gly Ser Gln Phe Ser Leu Asp Asp Val Glu Val Leu Thr Ala Thr Leu
     50                  55                  60
Asp Leu Glu Asp Val Arg Ser Tyr Arg Ala Glu Ile Ser Ser Arg Asn
 65                  70                  75                  80
Leu Ala Val Ser Ala Pro Val Asp Thr Cys Val Gly Cys Ser Ser Lys
                 85                  90                  95
Thr Trp Lys Val Ala Pro Phe Val Arg Ala Trp Trp Arg Pro
            100                 105                 110
```

<210> 984
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 984

```
Ala Pro Leu Ser Arg Leu Cys Phe Pro Gln Val Leu Val Asn Glu Gly
  1               5                  10                  15
Gly Gly Phe Asp Arg Ala Ser Gly Ser Phe Val Ala Pro Val Arg Gly
             20                  25                  30
Val Tyr Ser Phe Arg Phe His Val Val Lys Val Tyr Asn Arg Gln Thr
         35                  40                  45
```

```
Val Gln Val Thr Ser Ala Leu Ala Pro Ile Pro Gly Ser Gly Gly Trp
     50                  55                  60
Gly Gly Gly Arg Arg Gly Ala Gln Leu Thr Ser Gly Trp Thr Leu His
 65                  70                  75                  80
```

<210> 985
<211> 235
<212>Amino acid
<213> Homo sapiens

<400> 985

```
Pro His Ile Ile Gly Ala Glu Asp Asp Asp Phe Gly Thr Glu His Glu
  1               5                  10                  15
Gln Ile Asn Gly Gln Cys Ser Cys Phe Gln Ser Ile Glu Leu Leu Lys
            20                  25                  30
Ser Arg Pro Ala His Leu Ala Val Phe Leu Arg His Val Val Ser Gln
        35                  40                  45
Phe Asp Pro Ala Thr Leu Leu Cys Tyr Leu Tyr Ser Asp Leu Tyr Lys
    50                  55                  60
His Thr Asn Ser Lys Glu Thr Arg Arg Ile Phe Leu Glu Phe His Gln
65                  70                  75                  80
Phe Phe Leu Asp Arg Ser Ala His Leu Lys Val Ser Val Pro Asp Glu
                85                  90                  95
Met Ser Ala Asp Leu Glu Lys Arg Arg Pro Glu Leu Ile Pro Glu Asp
            100                 105                 110
Leu His Arg His Tyr Ile Gln Thr Met Gln Glu Arg Val His Pro Glu
        115                 120                 125
Val Gln Arg His Leu Glu Asp Phe Arg Gln Lys Arg Ser Met Gly Leu
    130                 135                 140
Thr Leu Ala Glu Ser Glu Leu Thr Lys Leu Asp Ala Glu Arg Asp Lys
145                 150                 155                 160
Asp Arg Leu Thr Leu Glu Lys Glu Arg Thr Cys Ala Glu Gln Ile Val
                165                 170                 175
Ala Lys Ile Glu Glu Val Leu Met Thr Ala Gln Ala Val Glu Glu Asp
            180                 185                 190
Lys Ser Ser Thr Met Gln Tyr Val Ile Leu Met Tyr Met Lys His Leu
        195                 200                 205
Gly Val Lys Val Lys Glu Pro Arg Asn Leu Glu His Lys Arg Gly Arg
    210                 215                 220
Ile Gly Phe Leu Pro Lys Ile Lys Gln Ser Met
225                 230                 235
```

<210> 986
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 986

```
Ser Pro Gly Thr Gly Arg Gly Pro Gly Pro Thr Ser Phe Val Cys Leu
  1               5                  10                  15
Pro Thr Pro Gln Cys Pro Phe Ile Asp Asp Phe Ile Leu Ala Leu His
            20                  25                  30
```

```
Arg Lys Ile Lys Asn Glu Pro Val Val Phe Pro Glu Gly Pro Glu Ile
        35                  40                  45
Ser Glu Glu Leu Lys Asp Leu Ile Leu Lys Met Leu Asp Lys Asn Pro
    50                  55                  60
Glu Thr Arg Ile Gly Val Pro Asp Ile Lys Leu His Pro Trp Val Thr
65                  70                  75                  80
Lys Asn Gly Glu Glu Pro Leu Pro Ser Glu Glu Glu His Cys Ser Val
                85                  90                  95
Val Glu Val Thr Glu Glu Glu Val Lys Asn Ser Val Arg Leu Ile Pro
            100                 105                 110
Ser Trp Thr Thr Val Ile Leu Val Lys Ser Met Leu Arg Lys Arg Ser
        115                 120                 125
Phe Gly Asn Pro Phe Glu Pro Gln Ala Arg Met Ala
    130                 135                 140
```

<210> 987
<211> 242
<212>Amino acid
<213> Homo sapiens

<400> 987

```
His Ala Ser Gly Ile Lys Ile Asp Lys Thr Ser Asp Gly Pro Lys Leu
  1               5                  10                  15
Phe Leu Thr Glu Glu Asp Gln Lys Lys Leu His Asp Phe Glu Glu Gln
            20                  25                  30
Cys Val Glu Met Tyr Phe Asn Glu Lys Asp Asp Lys Phe His Ser Gly
        35                  40                  45
Ser Glu Glu Arg Ile Arg Val Thr Phe Glu Arg Val Glu Gln Met Cys
    50                  55                  60
Ile Gln Ile Lys Glu Val Gly Asp Arg Val Asn Tyr Ile Lys Arg Ser
65                  70                  75                  80
Leu Gln Ser Leu Asp Ser Gln Ile Gly His Leu Gln Asp Leu Ser Ala
                85                  90                  95
Leu Thr Val Asp Thr Leu Lys Thr Leu Thr Ala Gln Lys Ala Ser Glu
            100                 105                 110
Ala Ser Lys Val His Asn Glu Ile Thr Arg Glu Leu Ser Ile Ser Lys
        115                 120                 125
His Leu Ala Gln Asn Leu Ile Asp Asp Gly Pro Val Arg Pro Ser Val
    130                 135                 140
Trp Lys Lys His Gly Val Val Asn Thr Leu Ser Ser Ser Leu Pro Gln
145                 150                 155                 160
Gly Asp Leu Glu Ser Asn Asn Pro Phe His Cys Asn Ile Leu Met Lys
                165                 170                 175
Asp Asp Lys Asp Pro Gln Cys Asn Ile Phe Gly Gln Asp Leu Pro Ala
            180                 185                 190
Val Pro Gln Arg Lys Glu Phe Asn Phe Pro Glu Ala Gly Ser Ser Ser
        195                 200                 205
Gly Ala Leu Phe Pro Ser Ala Val Ser Pro Pro Glu Leu Arg Gln Arg
    210                 215                 220
Leu His Gly Val Glu Leu Leu Lys Ile Phe Asn Lys Lys Gln Lys Lys
225                 230                 235                 240
Arg Ala
    242
```

<210> 988
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 988

```
Cys Cys Arg Trp Ile Asp Cys Phe Ala Leu Tyr Asp Gln Gln Glu Glu
 1               5                  10                  15
Leu Val Arg His Ile Glu Lys Val His Ile Asp Gln Arg Lys Gly Glu
            20                  25                  30
Asp Phe Thr Cys Phe Trp Ala Gly Cys Pro Arg Arg Tyr Lys Pro Phe
        35                  40                  45
Asn Ala Arg Tyr Lys Leu Leu Ile His Met Arg Val His Ser Gly Glu
    50                  55                  60
Lys Pro Asn Lys Cys Thr Phe Glu Gly Cys Glu Lys Ala Phe Ser Arg
65                  70                  75                  80
Leu Glu Asn Leu Lys Ile His Leu Arg Ser His Thr Gly Glu Lys Pro
                85                  90                  95
Tyr Leu Cys Gln His Pro Gly Cys Gln Lys Ala Phe Ser Asn Ser Ser
            100                 105                 110
Asp Arg Ala Lys His Gln Arg Thr His Leu Asp Thr Lys Pro Tyr Ala
        115                 120                 125
Cys Gln Ile Pro Gly Cys Thr Lys Arg Tyr Thr Asp Pro Ser Ser Leu
    130                 135                 140
Arg Lys His Val Lys Ala His Ser Ser Lys
145                 150             154
```

<210> 989
<211> 65
<212>Amino acid
<213> Homo sapiens

<400> 989

```
Leu Pro Leu Leu Trp Thr Leu Ser Asp Phe Gly Gly Thr Met Asp Gln
 1               5                  10                  15
Ser Gly Met Glu Ile Pro Val Thr Leu Ile Ile Lys Ala Pro Asn Gln
            20                  25                  30
Lys Tyr Ser Asp Gln Thr Ile Ser Cys Phe Leu Asn Trp Thr Val Gly
        35                  40                  45
Lys Leu Lys Thr His Leu Ser Asn Val Tyr Pro Ser Lys Pro Val Ser
    50                  55                  60
Val
65
```

<210> 990
<211> 297
<212>Amino acid
<213> Homo sapiens

<400> 990

```
Ala Gly Thr Arg Met Cys Val Val Ala Ala Ala Glu Glu Leu Val Cys
 1               5                  10                  15
Gly Ala Arg Gly Leu Trp Met Arg Arg Thr Arg Arg Pro Arg Phe Val
            20                  25                  30
```

```
Leu Met Asn Lys Met Asp Asp Leu Asn Leu His Tyr Arg Phe Leu Asn
          35                  40                  45
Trp Arg Arg Arg Ile Arg Glu Ile Arg Glu Val Arg Ala Phe Arg Tyr
      50                  55                  60
Gln Glu Arg Phe Lys His Ile Leu Val Asp Gly Asp Thr Leu Ser Tyr
 65                  70                  75                  80
His Gly Asn Ser Gly Glu Val Gly Cys Tyr Val Ala Ser Arg Pro Leu
                 85                  90                  95
Thr Lys Asp Ser Asn Tyr Phe Glu Val Ser Ile Val Asp Ser Gly Val
            100                 105                 110
Arg Gly Thr Ile Ala Val Gly Leu Val Pro Gln Tyr Tyr Ser Leu Asp
        115                 120                 125
His Gln Pro Gly Trp Leu Pro Asp Ser Val Ala Tyr His Ala Asp Asp
    130                 135                 140
Gly Lys Leu Tyr Asn Gly Arg Ala Lys Gly Arg Gln Phe Gly Ser Lys
145                 150                 155                 160
Cys Asn Ser Gly Asp Arg Ile Gly Cys Gly Ile Glu Pro Val Ser Phe
                165                 170                 175
Asp Val Gln Thr Ala Gln Ile Phe Phe Thr Lys Asn Gly Lys Arg Val
            180                 185                 190
Gly Ser Thr Ile Met Pro Met Ser Pro Asp Gly Leu Phe Pro Ala Val
        195                 200                 205
Gly Met His Ser Leu Gly Glu Glu Val Arg Leu His Leu Asn Ala Glu
    210                 215                 220
Leu Gly Arg Glu Asp Asp Ser Val Met Met Val Asp Ser Tyr Glu Asp
225                 230                 235                 240
Glu Trp Gly Arg Leu His Asp Val Arg Val Cys Gly Thr Leu Leu Glu
                245                 250                 255
Tyr Leu Gly Lys Gly Lys Ser Ile Val Asp Val Gly Leu Ala Gln Ala
            260                 265                 270
Arg His Pro Leu Ser Thr Arg Ser His Tyr Phe Glu Val Glu Ile Val
        275                 280                 285
Asp Pro Gly Glu Lys Cys Tyr Ile Ala
    290                 295     297
```

<210> 991
<211> 207
<212>Amino acid
<213> Homo sapiens

<400> 991

```
Gln Gln Ala Glu Glu His Leu Ala Ala Tyr Ser Val Ser Asp Ser Asp
  1               5                  10                  15
Ser Gly Lys Asp Pro Ser Met Glu Cys Cys Arg Arg Ala Thr Pro Gly
            20                  25                  30
Thr Leu Leu Leu Phe Leu Ala Phe Leu Leu Leu Ser Ser Arg Thr Ala
        35                  40                  45
Arg Ser Glu Glu Asp Arg Asp Gly Leu Trp Asp Ala Trp Gly Pro Trp
    50                  55                  60
Ser Glu Cys Ser Arg Thr Cys Gly Gly Gly Ala Ser Tyr Ser Leu Arg
 65                  70                  75                  80
Arg Cys Leu Ser Ser Lys Ser Cys Glu Gly Arg Asn Ile Arg Tyr Arg
                85                  90                  95
Thr Cys Ser Asn Val Asp Cys Pro Pro Glu Ala Gly Asp Phe Arg Ala
            100                 105                 110
Gln Gln Cys Ser Ala His Asn Asp Val Lys His His Gly Gln Phe Tyr
        115                 120                 125
Glu Trp Leu Pro Val Ser Asn Asp Pro Asp Asn Pro Cys Ser Leu Lys
    130                 135                 140
```

```
Cys Gln Ala Lys Gly Thr Thr Leu Val Val Glu Leu Ala Pro Lys Val
145                 150                 155                 160
Leu Asp Gly Thr Arg Cys Tyr Thr Glu Ser Leu Asp Met Cys Ile Ser
                165                 170                 175
Gly Leu Cys Gln Val Ser Ala Asp Leu Phe Ser Phe Asn Leu Ser Arg
            180                 185                 190
Gly Phe Gln Cys Leu Cys Val Asn Gly Leu His Ser Leu Thr Leu
        195                 200                 205     207
```

<210> 992
<211> 184
<212>Amino acid
<213> Homo sapiens

<400> 992

```
Arg Leu Leu Arg Gln Glu Leu Val Val Leu Cys His Leu His His Pro
  1               5                  10                  15
Ser Leu Ile Ser Leu Leu Ala Ala Gly Ile Arg Pro Arg Met Leu Val
             20                  25                  30
Met Glu Leu Ala Ser Lys Gly Ser Leu Asp Arg Leu Leu Gln Gln Asp
         35                  40                  45
Lys Ala Ser Leu Thr Arg Thr Leu Gln His Arg Ile Ala Leu His Val
     50                  55                  60
Ala Asp Gly Leu Arg Tyr Leu His Ser Ala Met Ile Ile Tyr Arg Asp
 65                  70                  75                  80
Leu Lys Pro His Asn Val Leu Leu Phe Thr Leu Tyr Pro Asn Ala Ala
                 85                  90                  95
Ile Ile Ala Lys Ile Ala Asp Tyr Gly Ile Ala Gln Tyr Cys Cys Arg
            100                 105                 110
Met Gly Ile Lys Thr Ser Glu Gly Thr Pro Gly Phe Arg Ala Pro Glu
        115                 120                 125
Val Ala Arg Gly Asn Val Ile Tyr Asn Gln Gln Ala Asp Val Tyr Ser
    130                 135                 140
Phe Gly Leu Leu Leu Tyr Asp Ile Leu Thr Thr Gly Gly Arg Ile Val
145                 150                 155                 160
Glu Gly Leu Lys Phe Pro Asn Glu Phe Asp Glu Leu Glu Ile Gln Gly
                165                 170                 175
Lys Leu Pro Asp Pro Val Lys Glu
            180                 184
```

<210> 993
<211> 144
<212>Amino acid
<213> Homo sapiens

<400> 993

```
Lys Ala Ser Asn Ser Thr His Glu Phe Arg Ile Gly Leu Pro Glu Gly
  1               5                  10                  15
Trp Glu Ser Glu Lys Lys Ala Val Ile Pro Leu Gly Ile Gly Pro Pro
             20                  25                  30
Leu Thr Leu Ile Cys Leu Gly Val Leu Gly Gly Ile Leu Ile Tyr Gly
         35                  40                  45
Arg Lys Gly Phe Gln Thr Ala His Phe Tyr Leu Lys Asp Ser Pro Ser
     50                  55                  60
```

```
Pro Lys Val Ile Ser Thr Pro Pro Pro Pro Ile Phe Pro Ile Ser Lys
 65                  70                  75                  80
Glu Val Gly Pro Ile Pro Ile Lys His Phe Pro Lys His Val Ala Asn
                 85                  90                  95
Leu His Ala Ser Arg Gly Phe Thr Glu Lys Phe Glu Thr Leu Lys Lys
            100                 105                 110
Phe Tyr Gln Glu Gly Gln Ser Cys Thr Val Asp Leu Gly Ile Thr Ala
        115                 120                 125
Asn Ser Ser Asn His Pro Asp Asn Arg His Arg Asn Arg Ser Leu Ile
    130                 135                 140             144
```

<210> 994
<211> 147
<212>Amino acid
<213> Homo sapiens

<400> 994

```
Ser Phe Pro Asp Arg Thr Ala Ser Leu Val Leu Leu Ser Val Pro Val
  1               5                  10                  15
Gly Gln Ala Gly Met Gln Gln Arg Gly Leu Ala Ile Val Ala Leu Ala
            20                  25                  30
Val Cys Ala Ala Leu His Ala Ser Pro Ala Ile Leu Pro Ile Ala Ser
        35                  40                  45
Ser Cys Cys Thr Glu Val Ser His His Ile Ser Arg Arg Leu Leu Glu
    50                  55                  60
Arg Val Asn Met Cys Arg Ile Gln Arg Ala Asp Gly Asp Cys Asp Leu
 65                  70                  75                  80
Ala Ala Val Ile Leu His Val Lys Arg Arg Arg Ile Cys Val Ser Pro
                85                  90                  95
His Asn His Thr Val Lys Gln Trp Met Lys Val Gln Ala Ala Lys Lys
            100                 105                 110
Asn Gly Lys Gly Asn Val Cys His Arg Lys Lys His His Gly Lys Arg
        115                 120                 125
Asn Ser Asn Arg Ala His Gln Gly Lys His Glu Thr Tyr Gly His Lys
    130                 135                 140
Thr Pro Tyr
145     147
```

<210> 995
<211> 245
<212>Amino acid
<213> Homo sapiens

<400> 995

```
Phe Glu Gln Pro Gly Asn Pro Gly Asp Pro Arg Val Arg Thr Pro Pro
  1               5                  10                  15
Pro Trp Gly Pro His Phe Phe Ala Leu Ile Pro Ser Ser Pro Lys Glu
            20                  25                  30
Val Pro Ala Thr Pro Ser Ser Arg Arg Asp Pro Ile Ala Pro Thr Ala
        35                  40                  45
Thr Leu Leu Ser Lys Lys Thr Pro Ala Thr Leu Ala Pro Lys Glu Ala
    50                  55                  60
```

```
Leu Ile Pro Pro Ala Met Thr Val Pro Ser Pro Lys Lys Thr Pro Ala
 65                  70                  75                  80
Ile Pro Thr Pro Lys Glu Ala Pro Ala Thr Pro Ser Ser Lys Glu Ala
                85                  90                  95
Ser Ser Pro Pro Ala Val Thr Pro Ser Thr Tyr Lys Gly Ala Pro Ser
            100                 105                 110
Pro Lys Glu Leu Leu Ile Pro Pro Ala Val Thr Ser Pro Ser Pro Lys
        115                 120                 125
Glu Ala Pro Thr Pro Pro Ala Val Thr Pro Pro Ser Pro Glu Lys Gly
    130                 135                 140
Pro Ala Thr Pro Ala Pro Lys Gly Thr Pro Thr Ser Pro Pro Val Thr
145                 150                 155                 160
Pro Ser Ser Leu Lys Asp Ser Pro Thr Ser Pro Ala Ser Val Thr Cys
                165                 170                 175
Lys Met Gly Ala Thr Val Pro Gln Ala Ser Lys Gly Leu Pro Ala Lys
            180                 185                 190
Lys Gly Pro Thr Ala Leu Lys Glu Val Leu Val Ala Pro Ala Pro Glu
        195                 200                 205
Ser Thr Pro Ile Ile Thr Ala Pro Thr Arg Lys Gly Pro Gln Thr Lys
    210                 215                 220
Lys Ser Ser Ala Thr Ser Pro Pro Ile Cys Pro Asp Pro Ser Ala Lys
225                 230                 235                 240
Asn Gly Ser Lys Gly
                245
```

<210> 996
<211> 25
<212>Amino acid
<213> Homo sapiens

<400> 996
```
Phe Phe Leu Lys Ile Gln Gly Leu Gly Trp Ala Arg Trp Leu Thr Pro
  1               5                  10                  15
Val Ile Pro Val Leu Trp Glu Ala Glu
             20                  25
```

<210> 997
<211> 56
<212>Amino acid
<213> Homo sapiens

<400> 997
```
Ala Gly Phe Gly Tyr Gly Leu Pro Ile Ser Arg Leu Tyr Ala Lys Tyr
  1               5                  10                  15
Phe Gln Gly Asp Leu Asn Leu Tyr Ser Leu Ser Gly Tyr Gly Thr Asp
             20                  25                  30
Ala Ile Ile Tyr Leu Lys Val Ser Leu Glu Phe Asn Ser Lys Ile Leu
         35                  40                  45
Phe Leu Lys Pro Leu Leu Leu Leu
     50                  55  56
```

<210> 998
<211> 198

<212>Amino acid
<213> Homo sapiens

<400> 998

```
Trp Met Arg Ala Pro Met Leu Gln Lys Gln Gln Ala Pro Arg Met Asp
 1               5                  10                  15
Thr Pro Pro Pro Glu Glu Arg Leu Glu Lys Gln Asn Glu Lys Leu Asn
            20                  25                  30
Asn Gln Glu Glu Glu Thr Glu Phe Lys Glu Leu Asp Gly Leu Arg Glu
        35                  40                  45
Ala Leu Ala Asn Leu Arg Gly Leu Ser Glu Glu Glu Arg Ser Glu Lys
    50                  55                  60
Ala Met Leu Arg Ser Arg Ile Glu Glu Gln Ser Gln Leu Ile Cys Ile
65                  70                  75                  80
Leu Lys Arg Arg Ser Asp Glu Ala Leu Glu Arg Cys Gln Ile Leu Glu
                85                  90                  95
Leu Leu Asn Ala Glu Leu Glu Glu Lys Met Met Gln Glu Ala Glu Lys
            100                 105                 110
Leu Lys Ala Gln Gly Glu Tyr Ser Arg Lys Leu Glu Glu Arg Phe Met
        115                 120                 125
Thr Leu Ala Ala Asn His Glu Leu Met Leu Arg Phe Lys Asp Glu Tyr
    130                 135                 140
Lys Ser Glu Asn Ile Lys Leu Arg Glu Glu Asn Glu Lys Leu Arg Leu
145                 150                 155                 160
Glu Asn Asn Ser Leu Phe Ser Gln Ala Leu Lys Asp Glu Glu Ala Lys
                165                 170                 175
Val Leu Gln Leu Thr Val Arg Cys Glu Ala Leu Thr Gly Glu Leu Glu
            180                 185                 190
Thr Leu Lys Glu Arg Cys
        195             198
```

<210> 999
<211> 79
<212>Amino acid
<213> Homo sapiens

<400> 999

```
Asp Pro Gly Ala Ser His Ala Ser Val Gln Val Gln Val Leu Lys Glu
 1               5                  10                  15
Gln Leu Phe Ala Gly Arg Met Pro Ser Pro Phe Arg Ser Cys Ala Leu
            20                  25                  30
Met Gly Met Cys Gly Ser Arg Ser Ala Asp Asn Leu Ser Cys Pro Ser
        35                  40                  45
Pro Leu Asn Val Met Glu Pro Val Ser Phe Phe Pro Leu Lys Ser Leu
    50                  55                  60
Gly Lys Gly Met Ile Gln His Phe Arg His Ile Val Ser Leu Val
65                  70                  75              79
```

<210> 1000
<211> 206
<212>Amino acid
<213> Homo sapiens

<400> 1000

```
Val Thr Thr Thr Thr His Ser Val Gly Arg Gly His Glu Leu Gln Leu
 1               5                  10                  15
Leu Asn Glu Glu Leu Arg Asn Ile Glu Leu Glu Cys Gln Asn Ile Met
            20                  25                  30
Gln Ala His Arg Leu Gln Lys Val Thr Asp Gln Tyr Gly Asp Ile Trp
        35                  40                  45
Thr Leu His Asp Gly Gly Phe Arg Asn Tyr Asn Thr Ser Ile Asp Met
    50                  55                  60
Gln Arg Gly Lys Leu Asp Asp Ile Met Glu His Pro Glu Lys Ser Asp
65                  70                  75                  80
Lys Asp Ser Ser Ser Ala Tyr Asn Thr Ala Glu Ser Cys Arg Ser Thr
                85                  90                  95
Pro Leu Thr Val Asp Arg Ser Pro Asp Ser Ser Leu Pro Arg Val Ile
            100                 105                 110
Asn Leu Thr Asn Lys Lys Asn Leu Arg Ser Thr Met Ala Ala Thr Gln
        115                 120                 125
Ser Ser Ser Gly Gln Ser Ser Lys Glu Ser Thr Ser Thr Lys Ala Lys
    130                 135                 140
Thr Thr Glu Gln Gly Cys Ser Ala Glu Ser Lys Glu Lys Val Leu Glu
145                 150                 155                 160
Gly Ser Lys Leu Pro Asp Gln Glu Lys Ala Val Ser Glu His Ile Pro
                165                 170                 175
Tyr Leu Ser Pro Tyr His Ser Ser Ser Tyr Arg Tyr Ala Asn Ile Pro
            180                 185                 190
Ala His Ala Arg His Tyr Gln Ser Tyr Met Gln Leu Ile Gln
        195                 200                 205 206
```

<210> 1001
<211> 138
<212>Amino acid
<213> Homo sapiens

<400> 1001

```
Val Trp Gly Cys Leu Ala Thr Val Ser Thr His Lys Lys Ile Gln Gly
 1               5                  10                  15
Leu Pro Phe Gly Asn Cys Leu Pro Val Ser Asp Gly Pro Phe Asn Asn
            20                  25                  30
Ser Thr Gly Ile Pro Phe Phe Tyr Met Thr Ala Lys Asp Pro Val Val
        35                  40                  45
Ala Asp Leu Met Lys Asn Pro Met Ala Ser Leu Met Leu Pro Glu Ser
    50                  55                  60
Glu Gly Glu Phe Cys Arg Lys Asn Ile Val Asp Pro Glu Asp Pro Arg
65                  70                  75                  80
Cys Val Gln Leu Thr Leu Thr Gly Gln Met Ile Ala Val Ser Pro Glu
                85                  90                  95
Glu Val Glu Phe Ala Lys Gln Ala Met Phe Ser Arg His Pro Gly Met
            100                 105                 110
Arg Lys Trp Pro Arg Gln Tyr Glu Trp Phe Phe Met Lys Met Arg Ile
        115                 120                 125
Glu His Ile Trp Leu Gln Lys Trp Tyr Gly
    130                 135         138
```

<210> 1002
<211> 133

<212>Amino acid
<213> Homo sapiens

<400> 1002

```
Gln Ala Ala Asn Met Ala Val Ala Arg Val Asp Ala Ala Leu Pro Pro
 1               5                  10                  15
Gly Glu Gly Ser Val Val Asn Trp Ser Gly Gln Gly Leu Gln Lys Leu
            20                  25                  30
Gly Pro Asn Leu Pro Cys Glu Ala Asp Ile His Thr Leu Ile Leu Asp
        35                  40                  45
Lys Asn Gln Ile Ile Lys Leu Glu Asn Leu Glu Lys Cys Lys Arg Leu
    50                  55                  60
Ile Gln Leu Ser Val Ala Asn Asn Arg Leu Val Arg Met Met Gly Val
65                  70                  75                  80
Ala Lys Leu Thr Leu Leu Arg Val Leu Asn Leu Pro His Asn Ser Ile
                85                  90                  95
Gly Cys Val Glu Gly Leu Lys Glu Leu Val His Leu Glu Trp Leu Asn
            100                 105                 110
Leu Ala Gly Asn Asn Leu Ile Ala Met Glu Gln Ile Asn Ser Cys Thr
        115                 120                 125
Ala Leu Gln His Leu
    130             133
```

<210> 1003
<211> 276
<212>Amino acid
<213> Homo sapiens

<400> 1003

```
Phe Arg Ala Ala Val Gly Ala Val Pro Glu Gly Ala Trp Lys Asp Thr
 1               5                  10                  15
Ala Gln Leu His Lys Ser Glu Glu Ala Lys Arg Val Leu Arg Tyr Tyr
            20                  25                  30
Leu Phe Gln Gly Gln Arg Tyr Ile Trp Ile Glu Thr Gln Gln Ala Phe
        35                  40                  45
Tyr Gln Val Ser Leu Leu Asp His Gly Arg Ser Cys Asp Asp Val His
    50                  55                  60
Arg Ser Arg His Gly Leu Ser Leu Gln Asp Gln Met Glu Arg Lys Ala
65                  70                  75                  80
Ile Tyr Gly Pro Asn Val Ile Ser Ile Pro Val Lys Ser Tyr Pro Gln
                85                  90                  95
Leu Leu Val Asp Glu Ala Phe Ser Ile Ala Leu Trp Leu Ala Asp His
            100                 105                 110
Tyr Tyr Trp Tyr Ala Leu Cys Ile Phe Leu Ile Ser Ser Ile Ser Ile
        115                 120                 125
Cys Leu Ser Leu Tyr Lys Thr Arg Lys Gln Ser Gln Thr Leu Arg Asp
    130                 135                 140
Met Val Lys Leu Ser Met Arg Val Cys Val Cys Arg Pro Gly Gly Glu
145                 150                 155                 160
Glu Glu Trp Val Asp Ser Ser Glu Leu Val Pro Gly Asp Cys Leu Val
                165                 170                 175
Leu Ser Gln Glu Gly Gly Leu Met Pro Cys Asp Ala Ala Leu Val Ala
            180                 185                 190
Gly Glu Cys Met Val Asn Asp Ser Ser Leu Thr Gly Glu Ser Ile Pro
        195                 200                 205
```

```
Val Leu Lys Thr Ala Leu Pro Glu Gly Leu Gly Pro Tyr Cys Ala Glu
    210                 215                 220
Thr His Arg Arg His Thr Leu Phe Cys Gly Thr Leu Ile Leu His Ala
225                 230                 235                 240
Arg Ala Tyr Val Gly Pro His Val Leu Ala Val Val Thr Arg Thr Gly
                245                 250                 255
Met Ser Arg Glu Ala Gly Leu Glu Arg Asp Pro Gly Ser Ala Pro Leu
            260                 265                 270
Lys Arg Trp Ser
        275 276
```

<210> 1004
<211> 222
<212>Amino acid
<213> Homo sapiens

<400> 1004

```
Phe Val Gly Gly Gly Leu His Leu His Leu Cys Leu Leu Leu Cys Phe
  1               5                  10                  15
Met Leu Pro Glu Asp Ala Ala Met Ala Val Leu Thr Ala Ser Asn His
             20                  25                  30
Val Ser Asn Val Thr Val Asn Tyr Asn Ile Thr Val Glu Arg Met Asn
         35                  40                  45
Arg Met Gln Gly Leu Arg Val Ser Thr Val Pro Ala Val Leu Ser Pro
     50                  55                  60
Asn Ala Thr Leu Ala Leu Thr Ala Gly Val Leu Val Asp Ser Ala Val
 65                  70                  75                  80
Glu Val Ala Phe Leu Trp Thr Phe Gly Asp Gly Glu Gln Ala Leu His
                85                  90                  95
Gln Phe Gln Pro Pro Tyr Asn Glu Ser Phe Pro Val Pro Asp Pro Ser
            100                 105                 110
Val Ala Gln Val Leu Val Glu His Asn Val Thr His Thr Tyr Ala Ala
        115                 120                 125
Pro Gly Glu Tyr Val Leu Thr Val Leu Ala Ser Asn Ala Phe Glu Asn
    130                 135                 140
Arg Thr Gln Gln Val Leu Ile Arg Ser Gly Arg Val Pro Ile Val Ser
145                 150                 155                 160
Leu Glu Cys Val Ser Cys Lys Ala Gln Ala Val Tyr Glu Val Ser Arg
                165                 170                 175
Ser Ser Tyr Val Tyr Leu Glu Gly Arg Cys Leu Asn Cys Ser Ser Gly
            180                 185                 190
Ser Lys Arg Gly Arg Trp Ala Ala Arg Thr Phe Ser Asn Lys Thr Leu
        195                 200                 205
Val Leu Asp Glu Thr Thr Thr Ser Thr Gly Ser Ala Ser Met
    210                 215                 220     222
```

<210> 1005
<211> 363
<212>Amino acid
<213> Homo sapiens

<400> 1005

```
Pro Glu Phe Leu Gly Arg Leu Phe Arg Gly Lys Ala Ala Thr Leu His
  1               5                  10                  15
```

```
Val His Ser Asp Gln Lys Pro Leu His Asp Gly Ala Leu Gly Ser Gln
                20                  25                  30
Gln Asn Leu Val Arg Met Lys Glu Ala Leu Arg Ala Ser Thr Met Asp
            35                  40                  45
Val Thr Val Val Leu Pro Ser Gly Leu Glu Lys Arg Ser Val Leu Asn
        50                  55                  60
Gly Ser His Ala Met Met Asp Leu Leu Val Glu Leu Cys Leu Gln Asn
65                  70                  75                  80
His Leu Asn Pro Ser His His Ala Leu Glu Ile Arg Ser Ser Glu Thr
                85                  90                  95
Gln Gln Pro Leu Ser Phe Lys Pro Asn Thr Leu Ile Gly Thr Leu Asn
            100                 105                 110
Val His Thr Val Phe Leu Lys Glu Lys Val Pro Glu Glu Lys Val Lys
        115                 120                 125
Pro Gly Pro Pro Lys Val Pro Glu Lys Ser Val Arg Leu Val Val Asn
    130                 135                 140
Tyr Leu Arg Thr Gln Lys Ala Val Val Arg Val Ser Pro Glu Val Pro
145                 150                 155                 160
Leu Gln Asn Ile Leu Pro Val Ile Cys Ala Lys Cys Glu Val Ser Pro
                165                 170                 175
Glu His Val Val Leu Leu Arg Asp Asn Ile Ala Gly Glu Glu Leu Glu
            180                 185                 190
Leu Ser Lys Ser Leu Asn Glu Leu Gly Ile Lys Glu Leu Tyr Ala Trp
        195                 200                 205
Asp Asn Arg Arg Glu Thr Phe Arg Lys Ser Ser Leu Gly Asn Asp Glu
    210                 215                 220
Thr Asp Lys Glu Lys Lys Lys Phe Leu Gly Phe Phe Lys Val Asn Lys
225                 230                 235                 240
Arg Ser Asn Ser Lys Gly Cys Leu Thr Thr Pro Asn Ser Pro Ser Met
                245                 250                 255
His Ser Arg Ser Leu Thr Leu Gly Pro Ser Leu Ser Leu Gly Ser Ile
            260                 265                 270
Ser Gly Val Ser Val Lys Ser Glu Met Lys Lys Arg Arg Ala Pro Pro
        275                 280                 285
Pro Pro Gly Ser Gly Pro Pro Val Gln Asp Lys Ala Ser Glu Lys Val
    290                 295                 300
Ser Leu Gly Ser Gln Ile Asp Leu Gln Lys Lys Lys Arg Arg Ala Pro
305                 310                 315                 320
Ala Pro Pro Pro Pro Gln Pro Pro Pro Pro Ser Pro Leu Ile Pro Asn
                325                 330                 335
Arg Thr Glu Asp Lys Glu Glu Asn Arg Lys Ser Thr Met Val Tyr Cys
            340                 345                 350
Cys Ala Ser Phe Pro Thr Gln Ala Lys Arg Phe
        355                 360         363
```

<210> 1006
<211> 95
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(95)
<223> X = any amino acid or stop code

<400> 1006

```
Val Gln Trp His Asn Leu His Ser Leu Gln Pro Leu Pro Ala Gly Phe
  1                 5                  10                  15
Lys Xaa Phe Leu Cys Phe Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys
```

```
             20                  25                  30
Ala Pro Pro Leu Pro Ala Pro Phe Phe Phe Tyr Phe Leu Phe Leu Val
         35                  40                  45
Glu Leu Gly Phe His His Ile Gly Xaa Ala Gly Leu Glu Leu Thr Ser
     50                  55                  60
Thr Asp Leu Pro Ala Ser Ala Ser Glu Ser Ala Gly Ile Thr Gly Met
 65                  70                  75                  80
Ser His Arg Ala Arg Pro Met Asp Phe Phe Leu Leu Lys Ile Leu
                 85                  90                  95
```

<210> 1007
<211> 151
<212>Amino acid
<213> Homo sapiens

<400> 1007

```
Gly Arg Arg Phe Arg Pro Pro Ser Asp Glu Glu Arg Glu Pro Trp Glu
  1               5                  10                  15
Pro Trp Thr Gln Leu Arg Leu Ser Gly His Leu Lys Pro Leu His Tyr
            20                  25                  30
Asn Leu Met Leu Thr Ala Phe Met Glu Asn Phe Thr Phe Ser Gly Glu
         35                  40                  45
Val Asn Val Glu Ile Ala Cys Arg Asn Ala Thr Arg Tyr Val Val Leu
     50                  55                  60
His Ala Ser Arg Val Ala Val Glu Lys Val Gln Leu Ala Glu Asp Arg
 65                  70                  75                  80
Ala Phe Gly Ala Val Pro Val Ala Gly Phe Phe Leu Tyr Pro Gln Thr
                 85                  90                  95
Gln Val Leu Val Val Val Leu Asn Arg Thr Leu Asp Ala Gln Arg Asn
            100                 105                 110
Tyr Asn Leu Lys Ile Ile Tyr Asn Ala Leu Ile Glu Asn Glu Leu Leu
        115                 120                 125
Gly Phe Phe Arg Ser Ser Tyr Val Leu His Gly Glu Arg Arg Phe Leu
    130                 135                 140
Gly Val Thr Gln Phe Ser Pro
145                 150 151
```

<210> 1008
<211> 64
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(64)
<223> X = any amino acid or stop code

<400> 1008

```
Lys Glu Leu Asp Pro Phe Tyr Asn Ser Xaa Arg Lys Ile Lys Tyr Leu
  1               5                  10                  15
Arg Ile Tyr Leu Thr Lys Glu Val Lys Asp Leu Tyr Lys Glu Asn Tyr
            20                  25                  30
Lys Thr Leu Leu Lys Glu Ile Thr Asp Asp Thr Asn Lys Lys His Ile
         35                  40                  45
```

```
Pro Ser Ser Trp Thr Gly Arg Ile Asn Thr Val Lys Met Thr Ile Leu
     50                  55                  60                  64
```

<210> 1009
<211> 60
<212>Amino acid
<213> Homo sapiens

<400> 1009

```
Val Pro His Pro Leu Gln Ala Ile His Glu Gln Met Asn Cys Lys Glu
  1               5                  10                  15
Tyr Gln Glu Asp Leu Ala Leu Arg Ala Gln Asn Asp Ala Ala Ala Arg
             20                  25                  30
Arg Pro Ser Glu Met Phe Lys Val Arg Leu Ala Gln Gly Arg Gly Leu
         35                  40                  45
Ala Ser Leu Ser Ser Gly Ile Gln Ser Gly Val Gly
     50                  55                  60
```

<210> 1010
<211> 44
<212>Amino acid
<213> Homo sapiens

<400> 1010

```
Arg Trp Asn Ser Leu Thr Cys Val Val Leu Thr Phe Leu Gly His Arg
  1               5                  10                  15
Leu Leu Lys Arg Phe Leu Val Pro Lys Leu Arg Arg Phe Leu Lys Pro
             20                  25                  30
Gln Gly His Pro Arg Leu Leu Leu Trp Phe Lys Arg
         35                  40                  44
```

<210> 1011
<211> 219
<212>Amino acid
<213> Homo sapiens

<400> 1011

```
Tyr Gly Glu Phe Val Thr Tyr Gln Gly Val Ala Val Thr Arg Ser Arg
  1               5                  10                  15
Lys Glu Gly Ile Ala His Asn Tyr Lys Asn Glu Thr Glu Trp Arg Ala
             20                  25                  30
Asn Ile Asp Thr Val Met Ala Trp Phe Thr Glu Glu Asp Leu Asp Leu
         35                  40                  45
Val Thr Leu Tyr Phe Gly Glu Pro Asp Ser Thr Gly His Arg Tyr Gly
     50                  55                  60
Pro Glu Ser Pro Glu Arg Arg Glu Met Val Arg Gln Val Asp Arg Thr
 65                  70                  75                  80
```

```
Val Gly Tyr Leu Arg Glu Ser Ile Ala Arg Asn His Leu Thr Asp Arg
                 85                  90                  95
Leu Asn Leu Ile Ile Thr Ser Asp His Gly Met Thr Thr Val Asp Lys
            100                 105                 110
Arg Ala Gly Asp Leu Val Glu Phe His Lys Phe Pro Asn Phe Thr Phe
        115                 120                 125
Arg Asp Ile Glu Phe Glu Leu Leu Asp Tyr Gly Pro Asn Gly Met Leu
    130                 135                 140
Leu Pro Lys Glu Gly Arg Leu Glu Lys Val Tyr Asp Ala Leu Lys Asp
145                 150                 155                 160
Ala His Pro Lys Leu His Val Tyr Lys Lys Glu Ala Phe Pro Glu Ala
                165                 170                 175
Phe His Tyr Ala Asn Asn Pro Arg Val Thr Pro Leu Leu Met Tyr Ser
            180                 185                 190
Asp Leu Gly Tyr Val Ile His Gly Val Ser Arg Leu Leu Glu Ala Pro
        195                 200                 205
Pro Pro Gly Ala Pro Ser Pro Gly Ser Gly Ser
    210                 215             219
```

<210> 1012
<211> 89
<212>Amino acid
<213> Homo sapiens

<400> 1012

```
Arg Ile Pro Leu Leu Arg Leu Arg Ser Ser Thr Tyr Arg Ser Lys Gly
  1               5                  10                  15
Phe Asp Val Thr Val Lys His Ser His Gly Ser Trp Thr Gly Phe Gly
             20                  25                  30
Gly Glu Asp Leu Ala Thr Ile Pro Lys Gly Leu Asn Thr Tyr Phe Leu
         35                  40                  45
Val Asn Ile Ala Thr Ile Phe Glu Ser Lys Asn Phe Phe Leu Pro Gly
     50                  55                  60
Ile Lys Trp Asn Gly Ile Leu Gly Leu Ser Tyr Ala Thr Leu Ala Lys
 65                  70                  75                  80
Pro Ser Ser Ser Leu Glu Thr Phe Phe
                 85                  89
```

<210> 1013
<211> 82
<212>Amino acid
<213> Homo sapiens

<400> 1013

```
Ile Lys Ser Tyr Ser Gly Pro Asn Gly Arg Ser Cys Gln Ile Trp Gln
  1               5                  10                  15
Arg Leu Arg Trp Gly Ser Arg Glu Leu Leu Leu Gly Trp Lys Leu Ser
             20                  25                  30
His Ser Phe Ser Thr Cys Pro Phe Gln Phe Pro Asp Ile Val Glu Phe
         35                  40                  45
Cys Glu Ala Met Ala Asn Ala Gly Lys Thr Val Ile Val Ala Ala Leu
     50                  55                  60
Asp Gly Thr Phe Gln Arg Lys Val Arg Arg Leu Ile Gln Val Trp Ser
 65                  70                  75                  80
```

```
Trp Asp
     82


     <210> 1014
     <211> 107
     <212>Amino acid
     <213> Homo sapiens

     <220>
     <221> misc_feature
     <222> (1)...(107)
     <223> X = any amino acid or stop code




     <400> 1014
Tyr Cys Phe Cys Phe Asp Leu Leu His Xaa Cys Ile His Arg Asp Val
  1               5                  10                  15
Lys Pro Glu Asn Ile Leu Ile Thr Lys His Ser Val Ile Lys Leu Cys
            20                  25                  30
Asp Phe Gly Phe Ala Arg Leu Leu Thr Gly Pro Ser Asp Tyr Tyr Thr
        35                  40                  45
Asp Tyr Val Ala Thr Arg Trp Tyr Arg Ser Pro Glu Leu Pro Val Gly
    50                  55                  60
Asp Thr Gln Tyr Gly Pro Pro Val Asp Val Trp Ala Ile Gly Cys Val
65                  70                  75                  80
Ser Ala Glu Leu Leu Ser Gly Lys Cys Leu Trp Trp Pro Gly Lys Ser
                85                  90                  95
Asp Met Leu Asp Gln Leu Tyr Leu Ile Arg Lys
            100                 105     107


     <210> 1015
     <211> 70
     <212>Amino acid
     <213> Homo sapiens



     <400> 1015
Arg Gly Trp Ala Leu Asp Trp Ile Gly Ala Asp Leu Ser Leu His Leu
  1               5                  10                  15
Gln Glu Glu Val Glu Thr Glu Val Ala Trp Glu Glu Cys Gly His Val
            20                  25                  30
Leu Leu Ser Leu Cys Tyr Ser Ser Gln Gln Gly Gly Leu Leu Val Gly
        35                  40                  45
Val Leu Arg Cys Ala His Leu Ala Pro Met Asp Ala Asn Gly Tyr Ser
    50                  55                  60
Asp Pro Phe Val Arg Leu
65                  70


     <210> 1016
     <211> 142
     <212>Amino acid
     <213> Homo sapiens
```

<400> 1016

```
Gly Gly Ile Leu Ala Met Glu Tyr Ala Pro Gly Gly Thr Leu Ala Glu
 1               5                  10                  15
Phe Ile Gln Lys Arg Cys Asn Ser Leu Leu Glu Glu Glu Thr Ile Leu
            20                  25                  30
His Phe Phe Val Gln Ile Leu Leu Ala Leu His His Val His Thr His
        35                  40                  45
Leu Ile Leu His Arg Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Lys
    50                  55                  60
His Arg Met Val Val Lys Ile Gly Asp Phe Gly Ile Ser Lys Ile Leu
65                  70                  75                  80
Ser Ser Lys Ser Lys Ala Tyr Thr Val Val Gly Thr Pro Cys Tyr Ile
                85                  90                  95
Ser Pro Glu Leu Cys Glu Gly Lys Pro Tyr Asn Gln Lys Ser Asp Ile
            100                 105                 110
Trp Ala Leu Gly Cys Val Leu Tyr Glu Leu Ala Ser Leu Lys Arg Ala
        115                 120                 125
Phe Glu Ala Ala Asn Leu Pro Ala Leu Val Leu Lys Ile Met
    130                 135                 140     142
```

<210> 1017
<211> 87
<212>Amino acid
<213> Homo sapiens

<400> 1017

```
Val Gln Cys Gly Gly Ile His Gln Val Ser Gly Ala Val Val Val Ser
 1               5                  10                  15
Gly Leu Leu Gln Gly Met Met Gly Leu Leu Gly Ser Pro Gly His Val
            20                  25                  30
Phe Pro His Cys Gly Pro Leu Val Leu Ala Pro Ser Leu Val Val Ala
        35                  40                  45
Gly Leu Ser Ala His Arg Glu Val Ala Gln Phe Cys Phe Thr His Trp
    50                  55                  60
Gly Leu Ala Leu Leu Tyr Val Ser Pro Glu Arg Arg Gly Met Val Pro
65                  70                  75                  80
Ser Gly Gly Val Trp Gly Asp
                85      87
```

<210> 1018
<211> 160
<212>Amino acid
<213> Homo sapiens

<400> 1018

```
Pro Arg Met Thr Gly Ser Thr His Ala Ser Ala Pro Ser Tyr Gly Gly
 1               5                  10                  15
Ser Cys Arg Asn Asn Leu Phe Tyr Arg Glu Glu Thr Tyr Thr Pro Lys
            20                  25                  30
Ala Glu Thr Asp Glu Met Asn Glu Val Glu Thr Ala Pro Ile Pro Glu
        35                  40                  45
Glu Asn His Val Trp Leu Gln Pro Arg Val Met Arg Pro Thr Lys Pro
```

```
     50                  55                  60
Lys Lys Thr Ser Ala Val Asn Tyr Met Thr Gln Val Val Arg Cys Asp
 65                  70                  75                  80
Thr Lys Met Lys Asp Arg Cys Ile Gly Ser Thr Cys Asn Arg Tyr Gln
                 85                  90                  95
Cys Pro Ala Gly Cys Leu Asn His Lys Ala Lys Ile Phe Gly Ser Leu
            100                 105                 110
Phe Tyr Glu Ser Phe Ala Ser Ile Cys Arg Ala Ala Ile His Tyr Gly
        115                 120                 125
Ile Leu Asp Asp Lys Gly Gly Leu Val Asp Ile Thr Arg Asn Gly Lys
    130                 135                 140
Val Pro Phe Phe Val Lys Ser Glu Arg His Gly Val Gln Ser Leu Arg
145                 150                 155                 160
```

<210> 1019
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1019

```
Val Pro Gln Asn Ile Ile Cys Ala Phe Phe Cys Val Pro Cys Arg Phe
  1               5                  10                  15
Ala Ser Thr Ile Pro Phe Trp Gly Leu Thr Leu His Leu Gln His Leu
            20                  25                  30
Gly Asn Asn Val Phe Leu Leu Gln Thr Leu Phe Gly Ala Val Thr Leu
        35                  40                  45
Leu Ala Asn Cys Val Ala Pro Trp Ala Leu Asn His Met Ser Arg Arg
    50                  55                  60
Leu Ser Gln Met Leu Leu Met Phe Leu Leu Ala Thr Cys Leu Leu Ala
 65                  70                  75                  80
Ile Ile Phe Val Pro Gln Glu Met Gln Thr Leu Arg Val Val Leu Ala
                85                  90                  95
Thr Leu Gly Val Gly Ala Ala Ser Leu Gly Ile Thr Cys Ser Thr Ala
            100                 105                 110
Gln Glu Asn Glu Leu Ile Pro Ser Ile Ile Arg Gly Arg Ala Thr Gly
        115                 120                 125
Ile Thr Gly Asn Phe Ala Asn Ile Gly Gly Ala Leu Ala Ser Leu Val
    130                 135                 140
Met Ile Leu Ser Ile Tyr Ser Arg Pro Leu Pro Trp Ile Ile Tyr Gly
145                 150                 155                 160
Val Phe Ala Ile Leu Ser Gly Leu Val Val Leu Leu Leu Pro
                165                 170                 174
```

<210> 1020
<211> 225
<212>Amino acid
<213> Homo sapiens

<400> 1020

```
Val Leu Val Ser Arg Asp His Met Lys Ser Ala Gln Gln Phe Phe Gln
  1               5                  10                  15
Leu Val Gly Gly Ser Ala Ser Glu Cys Asp Thr Ile Pro Gly Arg Gln
```

```
            20                  25                  30
Cys Met Ala Ser Cys Phe Phe Leu Leu Lys Gln Phe Asp Asp Val Leu
        35                  40                  45
Ile Tyr Leu Asn Ser Phe Lys Ser His Phe Tyr Asn Asp Asp Ile Phe
    50                  55                  60
Asn Phe Asn Tyr Ala Gln Ala Lys Ala Ala Thr Gly Asn Thr Ser Glu
65                  70                  75                  80
Gly Glu Glu Ala Phe Leu Leu Ile Gln Ser Glu Lys Met Lys Asn Asp
                85                  90                  95
Tyr Ile Tyr Leu Ser Trp Leu Ala Arg Gly Tyr Ile Met Asn Lys Lys
            100                 105                 110
Pro Arg Leu Ala Trp Glu Leu Tyr Leu Lys Met Glu Thr Ser Gly Glu
        115                 120                 125
Ser Phe Ser Leu Leu Gln Leu Ile Ala Asn Asp Cys Tyr Lys Met Gly
    130                 135                 140
Gln Phe Tyr Tyr Ser Ala Lys Ala Phe Asp Val Leu Glu Arg Leu Asp
145                 150                 155                 160
Pro Asn Pro Glu Tyr Trp Glu Gly Lys Arg Gly Ala Cys Val Gly Ile
                165                 170                 175
Phe Gln Met Ile Ile Ala Gly Arg Glu Pro Lys Glu Thr Leu Arg Glu
            180                 185                 190
Val Leu His Leu Leu Arg Ser Thr Gly Asn Thr Gln Val Glu Tyr Met
        195                 200                 205
Ile Arg Ile Met Lys Lys Trp Ala Lys Glu Asn Arg Val Ser Ile Leu
    210                 215                 220
Lys
225
```

<210> 1021
<211> 118
<212>Amino acid
<213> Homo sapiens

<400> 1021

```
Leu Lys Val Ser Asp Glu Leu Val Gln Gln Tyr Gln Ile Lys Asn Gln
 1               5                  10                  15
Cys Leu Ser Ala Ile Ala Ser Asp Ala Glu Gln Glu Pro Lys Ile Asp
            20                  25                  30
Pro Tyr Ala Phe Val Glu Gly Asp Glu Glu Phe Leu Phe Pro Asp Lys
        35                  40                  45
Lys Asp Arg Gln Asn Ser Glu Arg Glu Ala Gly Lys Lys His Lys Val
    50                  55                  60
Arg Glu Ile Thr Val His Gln Arg Val Thr Val Asp Phe Val Ala Leu
65                  70                  75                  80
His Ile Val Thr Leu Leu Leu Pro Gln Leu Ser His Phe Phe Cys Leu
                85                  90                  95
Arg Ile Glu Arg Val Ile Ile Tyr Leu Glu Lys Pro Ile Phe Ala Arg
            100                 105                 110
Leu Arg Trp Leu Met Pro
        115                 118
```

<210> 1022
<211> 178
<212>Amino acid
<213> Homo sapiens

<400> 1022

```
Gly Val Pro Arg Asn Leu Pro Ser Ser Leu Glu Tyr Leu Leu Leu Ser
 1               5                  10                  15
Tyr Asn Arg Ile Val Lys Leu Ala Pro Glu Asp Leu Ala Asn Leu Thr
            20                  25                  30
Ala Leu Arg Val Leu Asp Val Gly Gly Asn Cys Arg Arg Cys Asp His
        35                  40                  45
Ala Pro Asn Pro Cys Met Glu Cys Pro Arg His Phe Pro Gln Leu His
    50                  55                  60
Pro Asp Thr Phe Ser His Leu Ser Arg Leu Glu Gly Leu Val Leu Lys
65                  70                  75                  80
Asp Ser Ser Leu Ser Trp Leu Asn Ala Ser Trp Phe Arg Gly Leu Gly
                85                  90                  95
Asn Leu Arg Val Leu Asp Leu Ser Glu Asn Phe Leu Tyr Lys Cys Ile
            100                 105                 110
Thr Lys Thr Lys Ala Phe Gln Gly Leu Thr Gln Leu Arg Lys Leu Asn
        115                 120                 125
Leu Ser Phe Asn Tyr Gln Lys Arg Val Ser Phe Ala His Leu Val Ser
    130                 135                 140
Gly Pro Pro Phe Leu Arg Gly Ser Leu Gly Arg Pro Leu Lys Gly Ala
145                 150                 155                 160
Gly Thr Trp His Gly Asn Leu Ser Phe Pro Leu His Phe Glu Trp Gly
                165                 170                 175
Lys Thr
    178
```

<210> 1023
<211> 146
<212>Amino acid
<213> Homo sapiens

<400> 1023

```
Ile Leu Phe Ala Ala Leu Ile Trp Ser Ser Phe Asp Glu Asn Ile Glu
 1               5                  10                  15
Ala Ser Ala Gly Gly Gly Gly Gly Ser Ser Ile Asp Ala Val Met Val
            20                  25                  30
Asp Ser Gly Ala Val Val Glu Gln Tyr Lys Arg Met Gln Ser Gln Glu
        35                  40                  45
Ser Ser Ala Lys Arg Ser Asp Glu Gln Arg Lys Met Lys Glu Gln Gln
    50                  55                  60
Ala Ala Glu Glu Leu Arg Glu Lys Gln Ala Ala Glu Gln Glu Arg Leu
65                  70                  75                  80
Lys Gln Leu Glu Lys Glu Arg Leu Ala Ala Gln Glu Gln Lys Lys Gln
                85                  90                  95
Ala Glu Glu Ala Ala Lys Gln Ala Glu Leu Lys Gln Lys Gln Ala Glu
            100                 105                 110
Glu Ala Ala Ala Lys Ala Ala Ala Asp Ala Lys Ala Lys Ala Glu Ala
        115                 120                 125
Asp Ala Lys Ala Ala Glu Glu Ala Ala Lys Lys Ala Ala Ala Asp Ala
    130                 135                 140
Lys Lys
145 146
```

<210> 1024
<211> 39
<212>Amino acid

<213> Homo sapiens

<400> 1024

```
Ala Met Glu Ile Val His Glu Pro Arg Asp Leu Glu Arg Tyr Met Arg
  1               5                  10                  15
Glu Ala Val Lys Val Ser Asn Asp Ser Pro Val Leu Leu Asp Arg Phe
             20                  25                  30
Leu Asn Asp Ala Ile Glu Cys
         35              39
```

<210> 1025
<211> 53
<212>Amino acid
<213> Homo sapiens

<400> 1025

```
Met Leu Ser Pro Gly Tyr Asp Tyr Gly Tyr Val Cys Val Glu Phe Ser
  1               5                  10                  15
Leu Leu Glu Asp Ala Ile Gly Cys Met Glu Ala Asn Gln Val Ala Leu
             20                  25                  30
Tyr Phe Gly Gln Met Met Leu Glu Gly Tyr Ile Phe Leu Tyr Met Gly
         35                  40                  45
Arg Glu Gly Phe Lys
     50          53
```

<210> 1026
<211> 365
<212>Amino acid
<213> Homo sapiens

<400> 1026

```
Pro Arg Val Arg Ser Ser Gly Gly Gln Glu Asp Pro Ala Ser Gln Gln
  1               5                  10                  15
Trp Ala Arg Pro Arg Phe Thr Gln Pro Ser Lys Met Arg Arg Arg Val
             20                  25                  30
Ile Ala Arg Pro Val Gly Ser Ser Val Arg Leu Lys Cys Val Ala Ser
         35                  40                  45
Gly His Pro Arg Pro Asp Ile Thr Trp Met Lys Asp Asp Gln Ala Leu
     50                  55                  60
Thr Arg Pro Glu Ala Ala Glu Pro Arg Lys Lys Lys Trp Thr Leu Ser
 65                  70                  75                  80
Leu Lys Asn Leu Arg Pro Glu Asp Ser Gly Lys Tyr Thr Cys Arg Val
                 85                  90                  95
Ser Asn Arg Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val Asp Val Ile
            100                 105                 110
Gln Arg Thr Arg Ser Lys Pro Val Leu Thr Gly Thr His Pro Val Asn
        115                 120                 125
Thr Thr Val Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys Lys Val Arg
    130                 135                 140
Ser Asp Val Lys Pro Val Ile Gln Trp Leu Lys Arg Val Glu Tyr Gly
```

```
145                 150                 155                 160
Ala Glu Gly Arg His Asn Ser Thr Ile Asp Val Gly Gly Gln Lys Phe
                165                 170                 175
Val Val Leu Pro Thr Gly Asp Val Trp Ser Arg Pro Asp Gly Ser Tyr
            180                 185                 190
Leu Asn Lys Leu Leu Ile Thr Arg Ala Arg Gln Asp Asp Ala Gly Met
        195                 200                 205
Tyr Ile Cys Leu Gly Ala Asn Thr Met Gly Tyr Ser Phe Arg Ser Ala
    210                 215                 220
Phe Leu Thr Val Leu Pro Asp Pro Lys Pro Pro Gly Pro Pro Val Ala
225                 230                 235                 240
Ser Ser Ser Ser Ala Thr Ser Leu Pro Trp Pro Val Val Ile Gly Ile
                245                 250                 255
Pro Ala Gly Ala Val Phe Ile Leu Gly Thr Leu Leu Leu Trp Leu Cys
            260                 265                 270
Gln Ala Gln Lys Lys Pro Cys Thr Pro Ala Pro Ala Pro Pro Leu Pro
        275                 280                 285
Gly His Arg Pro Pro Gly Thr Ala Arg Asp Arg Ser Gly Asp Lys Asp
    290                 295                 300
Leu Pro Ser Leu Ala Ala Leu Ser Ala Gly Pro Gly Val Gly Leu Cys
305                 310                 315                 320
Glu Glu His Gly Ser Pro Ala Ala Pro Gln His Leu Leu Gly Pro Gly
                325                 330                 335
Pro Val Ala Gly Pro Lys Leu Tyr Pro Lys Leu Tyr Thr Asp Ile Pro
            340                 345                 350
His His Thr His Thr His Thr Pro His Pro Pro Ala Asn
        355                 360                 365
```

<210> 1027
<211> 30
<212>Amino acid
<213> Homo sapiens

<400> 1027

```
Asn Phe His Phe Thr Gly Lys Cys Leu Phe Met Ser Gly Leu Ser Glu
  1               5                  10                  15
Val Gln Leu Thr His Met Asp Asp His Thr Leu Pro Gly Tyr
            20                  25                  30
```

<210> 1028
<211> 104
<212>Amino acid
<213> Homo sapiens

<400> 1028

```
Ser Pro Arg Lys Arg Lys Thr Arg His Ser Thr Asn Pro Pro Leu Glu
  1               5                  10                  15
Cys His Val Gly Trp Val Met Asp Ser Arg Asp His Gly Pro Gly Thr
            20                  25                  30
Ser Ser Val Ser Thr Ser Asn Ala Ser Pro Ser Glu Gly Ala Pro Leu
        35                  40                  45
Ala Gly Ser Tyr Gly Cys Thr Pro His Ser Phe Pro Lys Phe Gln His
    50                  55                  60
Pro Ser His Glu Leu Leu Lys Glu Asn Gly Phe Thr Gln Gln Val Tyr
```

```
 65                  70                  75                  80
His Lys Tyr Arg Arg Arg Cys Leu Ser Glu Arg Lys Arg Leu Gly Ile
                 85                  90                  95
Gly Gln Ser Gln Glu Met Asn Thr
            100                 104
```

<210> 1029
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 1029

```
Pro Gly Ser Gly Gly Ser Ala Gly Gly Arg Asp Gly Ser Ala Tyr Gln
  1               5                  10                  15
Gly Ala Leu Leu Pro Arg Glu Gln Phe Ala Ala Pro Leu Gly Arg Pro
             20                  25                  30
Val Gly Thr Ser Tyr Ser Ala Thr Tyr Pro Ala Tyr Val Ser Pro Asp
         35                  40                  45
Val Ala Gln Ser Trp Thr Ala Gly Pro Phe Asp Gly Ser Val Leu His
     50                  55                  60
Gly Leu Pro Gly Arg Arg Pro Thr Phe Val Ser Asp Phe Leu Glu Glu
 65                  70                  75                  80
Phe Pro Gly Glu Gly Arg Glu Cys Val Asn Cys Gly Ala Leu Ser Thr
                 85                  90                  95
Pro Leu Trp Arg Arg Asp Gly Thr Gly His Tyr Leu Cys Asn Ala Cys
            100                 105                 110
Gly Leu Tyr His Lys Met Asn
        115                 119
```

<210> 1030
<211> 171
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(171)
<223> X = any amino acid or stop code

<400> 1030

```
Pro Asp His Arg His Gly Ala Leu Trp Trp Trp Tyr Ser Cys Gly Val
  1               5                  10                  15
Leu Pro Val Thr Val Ser Arg Asn Glu Gly Asp Glu Arg Asn Gln Val
             20                  25                  30
Leu Thr Leu Tyr Leu Trp Ile Arg Gln Glu Trp Thr Asp Ala Tyr Leu
         35                  40                  45
Arg Trp Asp Pro Asn Ala Tyr Gly Gly Leu Asp Ala Ile Arg Ile Pro
     50                  55                  60
Ser Ser Leu Val Trp Arg Pro Asp Ile Val Leu Tyr Asn Lys Tyr Cys
 65                  70                  75                  80
Leu Ser Ala Ala Pro Pro Leu Ser Tyr Pro Ser Leu Asp Leu Pro Leu
                 85                  90                  95
Ala Val Gly Val Xaa Xaa Ser Pro Leu Pro Thr Thr Xaa Pro Gly Cys
            100                 105                 110
```

```
His Ala Ala Leu Glu Ala Phe Pro Gln Asp Pro Ser Lys Leu Pro Ser
        115                 120                 125
Thr Gln Pro Leu His Gly Thr Pro Thr Leu Gly Tyr Pro Arg Pro Ala
    130                 135                 140
Gln Ala Glu Arg Leu Leu Gly Thr Tyr Cys Val Val Gln Gly Arg Cys
145                 150                 155                 160
Leu Asn His Lys Gly Leu Ser Arg Ala His Phe
                165                 170 171
```

<210> 1031
<211> 198
<212>Amino acid
<213> Homo sapiens

<400> 1031

```
Tyr Ala Leu Thr Gly Ala Leu Val Ile Val Thr Gly Met Val Met Gly
  1               5                  10                  15
Asn Ile Ala Asp Tyr Phe Asn Leu Pro Val Ser Ser Met Ser Asn Thr
            20                  25                  30
Phe Thr Phe Leu Asn Ala Gly Ile Leu Ile Ser Ile Phe Leu Asn Ala
        35                  40                  45
Trp Leu Met Glu Ile Val Pro Leu Lys Thr Gln Leu Arg Phe Gly Phe
    50                  55                  60
Leu Leu Met Val Leu Ala Val Ala Gly Leu Met Phe Ser His Ser Leu
65                  70                  75                  80
Ala Leu Phe Ser Ala Ala Met Phe Ile Leu Gly Val Val Ser Gly Ile
                85                  90                  95
Thr Met Ser Ile Gly Thr Phe Leu Val Thr Gln Met Tyr Glu Gly Arg
            100                 105                 110
Gln Arg Gly Ser Arg Leu Leu Phe Thr Asp Ser Phe Phe Ser Met Ala
        115                 120                 125
Gly Met Ile Phe Pro Met Ile Ala Ala Phe Leu Leu Ala Arg Ser Ile
    130                 135                 140
Glu Trp Tyr Trp Val Tyr Ala Cys Ile Gly Leu Val Tyr Val Ala Ile
145                 150                 155                 160
Phe Ile Leu Thr Phe Gly Cys Glu Phe Pro Ala Leu Cys Ser His Ala
                165                 170                 175
Thr Lys Leu Gly Thr Ala Ser Ser Tyr Pro Ser Leu Asp Val Val Gln
            180                 185                 190
Leu Arg Thr Leu Asn Ala
        195         198
```

<210> 1032
<211> 138
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(138)
<223> X = any amino acid or stop code

<400> 1032

```
Met Ala Lys Val Gly Leu Lys Thr Glu His Tyr Asp Arg Tyr Pro His
```

```
  1               5                  10                  15
Met Phe Ser Gly Gly Gln Arg Gln Arg Ile Ala Ile Ala Arg Gly Leu
             20                  25                  30
Met Leu Asp Pro Asp Val Val Ile Ala Asp Glu Pro Val Ser Ala Leu
         35                  40                  45
Asp Val Ser Val Arg Ala Gln Val Leu Asn Leu Met Met Asp Leu Gln
     50                  55                  60
Gln Glu Leu Gly Leu Ser Tyr Val Phe Ile Ser His Asp Leu Ser Val
 65                  70                  75                  80
Val Glu His Ile Ala Asp Glu Val Met Val Met Tyr Leu Gly Arg Cys
                 85                  90                  95
Val Glu Lys Gly Thr Lys Asp Gln Ile Phe Asn Asn Pro Arg His Pro
            100                 105                 110
Tyr Thr Gln Ala Leu Leu Ser Ala Thr Pro Arg Leu Asn Pro Asp Asp
        115                 120                 125
Arg Arg Glu Arg Ile Lys Leu Ser Xaa  *
    130                 135     137
```

<210> 1033
<211> 141
<212>Amino acid
<213> Homo sapiens

<400> 1033

```
Ser Ala Thr Leu Glu Arg Val Leu Asn His Pro Asp Glu Thr Gln Ala
  1               5                  10                  15
Arg Arg Leu Met Thr Leu Glu Asp Ile Val Ser Gly Tyr Ser Asn Val
             20                  25                  30
Leu Ile Ser Leu Ala Asp Ser Gln Gly Lys Thr Val Tyr His Ser Pro
         35                  40                  45
Gly Ala Pro Asp Ile Arg Glu Phe Thr Arg Asp Ala Ile Pro Asp Lys
     50                  55                  60
Asp Ala Gln Gly Gly Glu Val Tyr Leu Leu Ser Gly Pro Thr Met Met
 65                  70                  75                  80
Met Pro Gly His Gly His Gly His Met Glu His Ser Asn Trp Arg Met
                 85                  90                  95
Ile Asn Leu Pro Val Gly Pro Leu Val Asp Gly Lys Pro Ile Tyr Thr
            100                 105                 110
Leu Tyr Ile Ala Leu Ser Ile Asp Phe His Leu His Tyr Ile Asn Asp
        115                 120                 125
Leu Met Asn Lys Leu Ile Met Thr Ala Ser Val Ile Ile
    130                 135                 140 141
```

<210> 1034
<211> 112
<212>Amino acid
<213> Homo sapiens

<400> 1034

```
Val Leu Ala Tyr Pro Gly Ile Lys Val Ser Thr Ala Glu Ala Arg Ala
  1               5                  10                  15
Ile Leu Pro Ala Gln Tyr Arg Arg Gln Asp Cys Ile Ala His Gly Arg
             20                  25                  30
His Leu Ala Gly Phe Ile His Ala Cys Tyr Ser Arg Gln Pro Glu Leu
```

```
         35                  40                  45
Ala Ala Lys Leu Met Lys Asp Val Ile Ala Glu Pro Tyr Arg Glu Arg
     50                  55                  60
Leu Leu Pro Gly Phe Arg Gln Ala Arg Gln Ala Val Ala Glu Ile Gly
 65                  70                  75                  80
Ala Val Ala Ser Gly Ile Ser Gly Ser Gly Pro Thr Leu Phe Ala Leu
                 85                  90                  95
Cys Asp Lys Pro Glu Thr Ala Gln Arg Val Ala Asp Trp Leu Gly Lys
            100                 105                 110     112
```

<210> 1035
<211> 92
<212>Amino acid
<213> Homo sapiens

<400> 1035

```
Gly Gln Gln Gln Arg Val Ala Leu Ala Arg Ala Leu Ile Leu Lys Pro
  1               5                  10                  15
Lys Val Leu Leu Phe Asp Glu Pro Leu Ser Asn Leu Asp Ala Asn Leu
            20                  25                  30
Arg Arg Ser Met Arg Asp Lys Ile Arg Glu Leu Gln Lys Gln Phe Asp
         35                  40                  45
Ile Thr Ser Leu Tyr Val Thr His Asp Gln Ser Glu Ala Phe Ala Val
     50                  55                  60
Ser Asp Thr Val Leu Val Met Asn Lys Gly His Ile Met Gln Ile Gly
 65                  70                  75                  80
Ser Pro Gln Asp Leu Arg Val Arg Arg Leu Asn Trp
                 85                  90      92
```

<210> 1036
<211> 51
<212>Amino acid
<213> Homo sapiens

<400> 1036

```
Ala Val His Tyr Leu Glu Arg Val Arg Ile Ala Glu His Ala His Lys
  1               5                  10                  15
Phe Pro Gly Gln Ile Ser Gly Gly Gln Gln Gln Arg Val Ala Ile Ala
            20                  25                  30
Arg Ser Leu Cys Met Lys Pro Lys Ile Met Leu Phe Asp Glu Pro Thr
         35                  40                  45
Ser Ala Leu
     50  51
```

<210> 1037
<211> 72
<212>Amino acid
<213> Homo sapiens

<400> 1037

```
Ala Pro Tyr Asp Ala Glu Asn Tyr Phe Asp Tyr Asp Asn Leu Asn Asn
 1               5                  10                  15
Gly Pro Ser Leu Gln His Trp Phe Gly Val Asp Ser Leu Gly Arg Asp
            20                  25                  30
Ile Phe Ser Arg Val Leu Val Gly Ala Gln Ile Ser Leu Ala Ala Gly
        35                  40                  45
Val Phe Ala Val Phe Ile Gly Ala Ala Ile Gly Thr Leu Leu Gly Leu
    50                  55                  60
Leu Ala Gly Tyr Tyr Glu Gly Trp
65                  70      72
```

<210> 1038
<211> 188
<212>Amino acid
<213> Homo sapiens

<400> 1038

```
Val Phe Cys Leu Ile Ala Asp Leu Asp Pro Ile Asp Glu Leu Val Asp
 1               5                  10                  15
Phe Pro Ile Val Tyr Ala Ser Ala Leu Asn Gly Ile Ala Gly Leu Asp
            20                  25                  30
His Glu Asp Met Ala Glu Asp Met Thr Pro Leu Tyr Gln Ala Ile Val
        35                  40                  45
Asp His Val Pro Ala Pro Asp Val Asp Leu Asp Gly Pro Phe Gln Met
    50                  55                  60
Gln Ile Ser Gln Leu Asp Tyr Asn Ser Tyr Val Gly Val Ile Gly Ile
65                  70                  75                  80
Gly Arg Ile Lys Arg Gly Lys Val Lys Pro Asn Gln Gln Val Thr Ile
                85                  90                  95
Ile Asp Ser Glu Gly Lys Thr Arg Asn Ala Lys Val Gly Lys Val Leu
            100                 105                 110
Gly His Leu Gly Leu Glu Arg Ile Glu Thr Asp Leu Ala Glu Ala Gly
        115                 120                 125
Asp Ile Val Ala Ile Thr Gly Leu Gly Glu Leu Asn Ile Ser Asp Thr
    130                 135                 140
Val Cys Asp Thr Gln Asn Val Glu Ala Leu Pro Ala Leu Ser Val Asp
145                 150                 155                 160
Glu Pro Thr Val Ser Met Phe Phe Cys Val Asn Thr Ser Pro Phe Cys
                165                 170                 175
Gly Lys Glu Gly Lys Phe Val Thr Ser Arg Gln Ile
            180                 185         188
```

<210> 1039
<211> 122
<212>Amino acid
<213> Homo sapiens

<400> 1039

```
Gln Gly Thr Arg Ala Glu Ser Gln Gly Ser Ser Lys Asp Lys Thr Arg
 1               5                  10                  15
Leu Ala Phe Ala Gly Leu Lys Phe Gly Asp Tyr Gly Ser Ile Asp Tyr
```

```
          20                  25                  30
Gly Arg Asn Tyr Gly Val Ala Tyr Asp Ile Gly Ala Trp Thr Asp Val
        35                  40                  45
Leu Pro Glu Phe Gly Gly Asp Thr Trp Thr Gln Thr Asp Val Phe Met
    50                  55                  60
Thr Gln Arg Ala Thr Gly Val Ala Thr Tyr Arg Asn Asn Asp Phe Phe
65                  70                  75                  80
Gly Leu Val Asp Gly Leu Asn Phe Ala Ala Gln Tyr Gln Gly Lys Asn
                85                  90                  95
Asp Arg Ser Asp Phe Asp Asn Tyr Thr Glu Gly Asn Gly His Gly Phe
            100                 105                 110
Gly Phe Ser Ala Thr Tyr Glu Tyr Glu Gly
        115                 120     122
```

<210> 1040
<211> 65
<212>Amino acid
<213> Homo sapiens

<400> 1040

```
Asp Thr Tyr Ser Val Ser Ile Pro Leu Gly Ala Thr Ile Asn Met Ala
  1               5                  10                  15
Gly Ala Ala Ile Thr Ile Thr Val Leu Thr Leu Ala Ala Val Asn Thr
            20                  25                  30
Leu Gly Ile Pro Val Asp Leu Pro Thr Ala Leu Leu Leu Ser Val Val
        35                  40                  45
Ala Ser Leu Cys Ala Cys Gly Ala Ser Gly Val Ala Gly Gly Ser Leu
    50                  55                  60
Leu
 65
```

<210> 1041
<211> 46
<212>Amino acid
<213> Homo sapiens

<400> 1041

```
Ala Asn Ala Gln Gln Gly Leu Pro Ser Gly Ile Thr Leu Lys Leu Asn
  1               5                  10                  15
Asn Leu Val Asp Lys Gly Leu Val Asp Arg Leu Tyr Ala Ala Ser Ser
            20                  25                  30
Ser Gly Val Pro Val Asn Leu Leu Val Arg Gly Thr Cys Ser
        35                  40                  45  46
```

<210> 1042
<211> 146
<212>Amino acid
<213> Homo sapiens

<400> 1042

```
Ala Arg Met Thr Leu Ile Pro Gly Thr His Leu Leu Glu Asn Ile His
 1               5                  10                  15
Asn Ile Trp Val Asn Gly Val Gly Thr Asn Ser Ala Pro Phe Trp Arg
            20                  25                  30
Met Leu Leu Asn Ser Phe Val Met Ala Phe Ser Ile Thr Leu Gly Lys
        35                  40                  45
Ile Thr Val Ser Met Leu Ser Ala Phe Ala Ile Val Trp Phe Arg Phe
    50                  55                  60
Pro Leu Arg Asn Leu Phe Phe Trp Met Ile Phe Ile Thr Leu Met Leu
65                  70                  75                  80
Pro Val Glu Val Arg Ile Phe Pro Thr Val Glu Val Ile Ala Asn Leu
                85                  90                  95
Gln Met Leu Asp Ser Tyr Ala Gly Leu Thr Leu Pro Leu Met Ala Ser
            100                 105                 110
Ala Thr Ala Thr Phe Leu Phe Arg Lys Leu Asn Met Ser Gly Pro Asp
        115                 120                 125
Lys Val Val Pro Ala Ala Arg Ile Ser Gly Tyr Gly Pro Arg Val Arg
    130                 135                 140
Lys Gln
145 146
```

<210> 1043
<211> 133
<212>Amino acid
<213> Homo sapiens

<400> 1043

```
Cys Ala Lys Cys Leu Arg Asp Ala Asp Glu Cys Pro Ser Gly Ala Phe
 1               5                  10                  15
Glu Arg Ile Gly Arg Asp Ile Ser Leu Asp Ala Leu Glu Arg Glu Val
            20                  25                  30
Met Lys Asp Asp Ile Phe Phe Arg Thr Ser Gly Gly Gly Val Thr Leu
        35                  40                  45
Ser Gly Gly Glu Val Leu Met Gln Ala Glu Phe Ala Thr Arg Phe Leu
    50                  55                  60
Gln Arg Leu Arg Leu Trp Gly Val Ser Cys Ala Ile Glu Thr Ala Gly
65                  70                  75                  80
Asp Ala Pro Ala Ser Lys Leu Leu Pro Leu Ala Lys Leu Cys Asp Glu
                85                  90                  95
Val Leu Phe Asp Leu Lys Ile Met Asp Ala Thr Gln Ala Arg Asp Val
            100                 105                 110
Val Lys Met Asn Leu Pro Arg Val Leu Glu Asn Leu Arg Leu Leu Val
        115                 120                 125
Ser Glu Gly Val Asn
    130         133
```

<210> 1044
<211> 115
<212>Amino acid
<213> Homo sapiens

<400> 1044

```
Tyr Leu Leu Leu Phe Val Cys Phe Leu Val Met Ser Leu Leu Val Gly
```

```
  1               5                  10                  15
Leu Val Tyr Lys Phe Thr Ala Glu Arg Ala Gly Lys Gln Ser Leu Asp
             20                  25                  30
Asp Leu Met Asn Ser Ser Leu Tyr Leu Met Arg Ser Glu Leu Arg Glu
         35                  40                  45
Ile Pro Pro His Asp Trp Gly Lys Thr Leu Lys Glu Met Asp Leu Asn
     50                  55                  60
Leu Ser Phe Asp Leu Arg Val Glu Pro Leu Ser Lys Tyr His Leu Asp
 65                  70                  75                  80
Asp Ile Ser Met His Arg Leu Arg Gly Gly Glu Ile Val Ala Leu Asp
                 85                  90                  95
Asp Gln Tyr Thr Phe Leu Gln Arg Ile Pro Arg Ser His Tyr Val Leu
            100                 105                 110
Ala Val Gly
        115
```

<210> 1045
<211> 69
<212>Amino acid
<213> Homo sapiens

<400> 1045

```
Val Glu Leu Phe Leu Ser Asp Glu Gly Asp Asp Val Val Ile Glu Val
  1               5                  10                  15
Ala Asp Gln Gly Cys Gly Val Pro Glu Ser Leu Arg Asp Lys Ile Phe
             20                  25                  30
Glu Gln Gly Val Ser Thr Arg Ala Asp Glu Pro Gly Glu His Gly Ile
         35                  40                  45
Gly Leu Tyr Leu Ile Ala Ser Tyr Val Thr Arg Cys Gly Gly Val Ile
     50                  55                  60
Thr Leu Glu Asp Asn
 65                  69
```

<210> 1046
<211> 69
<212>Amino acid
<213> Homo sapiens

<400> 1046

```
Asp Ala Ile Ile Ala Pro Asp Ala Asn Ala Leu Pro Ala Ala Ala Gln
  1               5                  10                  15
Ala Ala Glu Asn Leu Lys Asn Asp Lys Val Ala Ile Val Gly Phe Ser
             20                  25                  30
Thr Pro Asn Val Met Arg Pro Tyr Val Glu Arg Gly Thr Val Lys Glu
         35                  40                  45
Phe Gly Leu Trp Asp Val Val Gln Gln Gly Lys Ile Ser Val Tyr Val
     50                  55                  60
Ala Asp Ala Leu Gln
 65                  69
```

<210> 1047
<211> 43
<212>Amino acid

<213> Homo sapiens

<400> 1047

```
Tyr Ile Val Val Thr Gly Lys Thr His Cys Gly Thr Pro Leu Thr Thr
  1               5                  10                  15
Val Thr Gly Asp Ala Thr Gln Ser Gly Tyr Leu Thr Leu Asn Leu Pro
             20                  25                  30
Glu Met Trp Glu Val Ser Gly Tyr Asn Arg Val
         35                  40          43
```

<210> 1048
<211> 77
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(77)
<223> X = any amino acid or stop code

<400> 1048

```
Xaa Glu Gly Val Glu Pro Asp Ile Asn Ala Ser Lys Thr Arg Gln Gln
  1               5                  10                  15
Leu Asn Asp Val Ala Gly Lys Met Lys Ile Ile Glu Ala Arg Leu Ser
             20                  25                  30
Ala Leu Thr Asn Asn Gln Thr Lys Ser Leu Lys Leu Asn Pro Val Ala
         35                  40                  45
Leu Pro Lys Val Ala Ser Gln Leu Leu Asp Glu Leu Gly Tyr Ser Leu
     50                  55                  60
Leu Ala Arg Arg Ala Asp Leu Gln Ser Ala His Xaa  *
 65                  70                  75  76
```

<210> 1049
<211> 79
<212>Amino acid
<213> Homo sapiens

<400> 1049

```
Glu Asn Ile Ala Glu Glu Tyr Ala Thr Lys Arg Tyr Arg Ser Asn Val
  1               5                  10                  15
Ile Asn Trp Gly Met Leu Pro Leu Gln Met Ala Glu Val Pro Thr Phe
             20                  25                  30
Glu Val Gly Asp Tyr Ile Tyr Ile Pro Gly Ile Lys Ala Ala Leu Asp
         35                  40                  45
Asn Pro Gly Thr Thr Phe Lys Gly Tyr Val Ile His Glu Asp Ala Pro
     50                  55                  60
Val Thr Glu Ile Thr Leu Tyr Met Glu Ser Gln Glu Ala Arg Thr
 65                  70                  75              79
```

<210> 1050
<211> 99
<212>Amino acid
<213> Homo sapiens

<400> 1050

```
Leu Gln Thr Glu Ile Gly Ser Met Val Tyr Ala Val Lys Pro Gly Asp
 1               5                  10                  15
Gly Ser Ala Arg Glu Gln Ala Ala Ser Cys Gln Arg Val Ile Gly Gly
            20                  25                  30
Leu Ala Asn Ile Ala Glu Glu Tyr Ala Thr Lys Arg Tyr Arg Ser Asn
        35                  40                  45
Val Ile Asn Trp Gly Met Leu Pro Leu Gln Met Ala Glu Val Pro Thr
    50                  55                  60
Phe Glu Val Gly Asp Tyr Ile Tyr Ile Leu Gly Phe Lys Ala Ala Lys
65                  70                  75                  80
Tyr Ser Pro Gly Thr Ala Phe Thr Val Tyr Ala Ile Ser Gly Tyr Gly
                85                  90                  95
Pro Arg Ile
        99
```

<210> 1051
<211> 114
<212>Amino acid
<213> Homo sapiens

<400> 1051

```
Thr Leu Glu Asp Leu Leu Met Ala Leu Asp Gly Glu Gln His Leu Gln
 1               5                  10                  15
Gln Gln Val Ser Glu Lys Val Leu Ala Asp Asn Val Leu Ile Ala Pro
            20                  25                  30
Gly Ser Val Lys Pro Asp Ala Thr Phe Trp Ser Ala Leu Ile Gln Asp
        35                  40                  45
Arg Tyr Asn Val Met Thr Cys Ile Glu Lys Asp Ala Cys Val Leu Val
    50                  55                  60
Glu Gln Asp Leu Asn Ser Asp Gly Gln Ala Glu Arg Ile Leu Phe Ala
65                  70                  75                  80
Phe Asn Asp Asp Arg Val Ile Val Tyr Gly Phe Asp Ser Asp Arg Lys
                85                  90                  95
Glu Trp Asp Ala Leu Asp Met Ser Leu Leu Pro Asn Glu Ile Thr Lys
            100                 105                 110
Glu Lys
    114
```

<210> 1052
<211> 210
<212>Amino acid
<213> Homo sapiens

<400> 1052

```
Glu Ser Asn Ser Arg Cys Arg Lys Met Pro Gly Glu Arg Cys Arg Gly
  1               5                  10                  15
Gly Pro Ala Arg Leu Ser Leu Leu Leu Asp Leu Pro Thr Arg Pro Leu
             20                  25                  30
Pro His Pro Arg Gln Val Ile Asp Phe Gly Ser Ala Ser Ile Phe Ser
         35                  40                  45
Glu Val Arg Tyr Val Lys Glu Pro Tyr Ile Gln Ser Arg Phe Tyr Arg
     50                  55                  60
Ala Pro Glu Ile Leu Leu Gly Leu Pro Phe Cys Glu Lys Val Asp Val
 65                  70                  75                  80
Trp Ser Leu Gly Cys Val Met Asp Glu Leu His Leu Gly Trp Pro Leu
                 85                  90                  95
Tyr Pro Gly Asn Asn Glu Tyr Asp Gln Val Arg Tyr Ile Cys Glu Thr
            100                 105                 110
Gln Gly Leu Pro Lys Pro His Leu Leu His Ala Ala Cys Lys Ala His
        115                 120                 125
His Phe Phe Lys Arg Asn Pro His Pro Asp Ala Ala Asn Pro Trp Gln
    130                 135                 140
Leu Lys Ser Ser Ala Asp Tyr Leu Ala Glu Thr Lys Val Arg Pro Leu
145                 150                 155                 160
Glu Arg Arg Lys Tyr Met Leu Lys Ser Leu Asp Gln Ile Glu Thr Val
                165                 170                 175
Asn Gly Gly Ser Val Ala Ser Arg Leu Thr Phe Pro Asp Arg Glu Ala
            180                 185                 190
Leu Ala Glu His Ala Asp Leu Lys Ser Met Val Glu Leu Met Lys Arg
        195                 200                 205
Leu Leu
    210
```

<210> 1053
<211> 100
<212>Amino acid
<213> Homo sapiens

<400> 1053

```
Arg Leu Val Lys Lys Arg Val Glu Cys Arg Gln Cys Gly Lys Ala Gly
  1               5                  10                  15
Arg Asn Gln Ser Thr Leu Lys Thr His Met Arg Ser His Thr Gly Glu
             20                  25                  30
Lys Pro Tyr Glu Cys Asp His Cys Gly Lys Ala Phe Ser Ile Gly Ser
         35                  40                  45
Asn Leu Asn Val His Arg Arg Ile His Thr Gly Glu Lys Pro Tyr Glu
     50                  55                  60
Cys Leu Val Cys Gly Glu Ala Phe Ser Asp His Ser Ser Leu Arg Ser
 65                  70                  75                  80
His Val Lys Thr His Arg Gly Glu Lys Leu Phe Val Ser Ser Val Trp
                 85                  90                  95
Lys Arg Leu Gln
            100
```

<210> 1054
<211> 194
<212>Amino acid
<213> Homo sapiens

<400> 1054
Cys Gly Pro Gly Phe Ser Leu Ser Phe Phe Phe Leu Arg Trp Ser Phe
1 5 10 15
Ala Leu Val Ala Gln Ala Gly Val Gln Trp His Asp Leu Gly Ser Leu
20 25 30
Gln Pro Pro Ala Pro Gly Phe Lys Arg Phe Ser Ser Leu Ser Leu Leu
35 40 45
Ser Arg Trp Asp Tyr Arg His Ala His Ala Arg Leu Ile Phe Val Phe
50 55 60
Leu Val Glu Met Gly Phe Leu His Val Gly Gln Ala Gly Leu Glu Leu
65 70 75 80
Pro Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser Ala Arg Ile
85 90 95
Thr Gly Val Thr Thr Pro Leu Gly Thr Phe Phe Phe Phe Leu Arg Trp
100 105 110
Ser Phe Ala Leu Val Ala Gln Ala Gly Gly Gln Cys Leu Asp Leu Gly
115 120 125
Ser Leu Gln Leu Pro Pro Pro Gly Phe Lys Arg Leu Val Cys His Phe
130 135 140
Gln Thr Pro Gln Lys His Arg Cys Ser Cys Gln Ala Pro Gly Asp Cys
145 150 155 160
Leu Gln Glu Ser Phe Val Met Thr Gly Cys Val Leu Arg Thr Val Ser
165 170 175
Glu Ser Val Gln Arg Ala Asn Ala Gly Ala Gly Ala Glu Thr Val Gln
180 185 190
Gly Leu
194

<210> 1055
<211> 351
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(351)
<223> X = any amino acid or stop code

<400> 1055
Met Gly Asn Ala Ala Ala Ala Lys Lys Gly Ser Glu Gln Glu Ser Val
1 5 10 15
Lys Glu Phe Leu Ala Lys Ala Lys Glu Asp Phe Leu Lys Lys Trp Glu
20 25 30
Ser Pro Ala Gln Asn Thr Ala His Leu Asp Gln Phe Glu Arg Ile Lys
35 40 45
Thr Leu Gly Thr Gly Ser Phe Gly Arg Val Met Leu Val Lys His Lys
50 55 60
Glu Thr Gly Asn His Tyr Ala Met Lys Ile Leu Asp Xaa Gln Lys Val
65 70 75 80
Gly Lys Leu Lys Gln Ile Glu His Thr Leu Asn Glu Lys Arg Ile Leu
85 90 95
Gln Ala Val Asn Phe Pro Phe Leu Val Lys Leu Glu Phe Ser Phe Lys
100 105 110
Asp Asn Ser Asn Leu Tyr Met Val Met Glu Tyr Val Pro Gly Gly Glu
115 120 125
Met Phe Ser His Leu Arg Arg Ile Gly Arg Phe Ser Glu Pro His Ala
130 135 140
Arg Phe Tyr Ala Ala Gln Ile Val Leu Thr Phe Glu Tyr Leu His Ser

```
145                 150                 155                 160
Leu Asp Leu Ile Tyr Arg Asp Leu Lys Pro Glu Asn Leu Leu Ile Asp
                165                 170                 175
Gln Gln Gly Tyr Ile Gln Val Thr Asp Phe Gly Phe Ala Lys Arg Val
            180                 185                 190
Lys Gly Arg Thr Trp Thr Leu Cys Gly Thr Pro Glu Tyr Leu Ala Pro
        195                 200                 205
Glu Ile Ile Leu Ser Lys Gly Tyr Asn Lys Ala Val Asp Trp Trp Ala
    210                 215                 220
Leu Gly Val Leu Ile Tyr Glu Met Ala Ala Gly Tyr Pro Pro Phe Phe
225                 230                 235                 240
Ala Asp Gln Pro Ile Gln Ile Tyr Glu Lys Ile Val Ser Gly Lys Val
                245                 250                 255
Arg Phe Pro Ser His Phe Ser Ser Asp Leu Lys Asp Leu Leu Arg Asn
            260                 265                 270
Leu Leu Gln Val Asp Leu Thr Lys Arg Phe Gly Asn Leu Lys Asn Gly
        275                 280                 285
Val Asn Asp Ile Lys Asn His Lys Trp Phe Ala Thr Thr Asp Trp Ile
    290                 295                 300
Ala Ile Tyr Gln Arg Lys Val Glu Ala Pro Phe Ile Pro Lys Phe Lys
305                 310                 315                 320
Gly Pro Gly Asp Thr Ser Asn Phe Asp Asp Tyr Glu Glu Glu Glu Ile
                325                 330                 335
Arg Val Ser Ile Asn Glu Lys Phe Gly Lys Glu Phe Ser Glu Phe
            340                 345                 350 351
```

<210> 1056
<211> 136
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(136)
<223> X = any amino acid or stop code

<400> 1056

```
Ser Ser Ser Arg Ser Ser His Gly Asp Ser Pro Pro His Ser Gln Thr
  1               5                  10                  15
Pro Cys Asp Thr Asn Arg Gly Leu Asp Thr Lys His Xaa Asp Ser Gln
             20                  25                  30
Ser Ile Glu Glu Lys Asp Ser Ser Gln Ser Glu Xaa Asn Arg Ile Glu
         35                  40                  45
Arg Arg Lys Glu Val Glu Arg Ile Leu Gln Thr Asn Ser Asp Tyr Met
     50                  55                  60
Xaa His Trp Ser Asn Xaa Pro Glu Asn Ile Leu Pro Lys Lys Phe Phe
 65                  70                  75                  80
Ser Lys His Gln Lys Cys Thr Ala Thr Leu Ser Met Arg Asn Thr Ser
                 85                  90                  95
Ile Met Lys Lys Glu Gly Leu Phe Xaa Ala Gln Phe Pro Ser Leu Leu
            100                 105                 110
Leu Ser His Leu Pro Ala Val Gly Leu Gly Ile Tyr Thr Gly Thr His
        115                 120                 125
Leu Thr Thr Ser Thr Ser Thr Phe
    130                 135 136
```

<210> 1057
<211> 79

<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(79)
<223> X = any amino acid or stop code

<400> 1057

```
Thr Phe His Ser Ser Leu Glu Lys Asn Ile Leu Gln Pro Cys Arg Xaa
 1               5                  10                  15
Arg Arg Ala Ile Cys Leu Pro Leu Leu Leu Xaa Pro Ser Val Pro Leu
            20                  25                  30
Leu Ala Pro Gln Tyr Phe Ser Asp Leu Arg Asn Ser Ile Val Asn Ser
        35                  40                  45
Gln Pro Pro Glu Lys Gln Gln Ala Met His Leu Cys Phe Glu Asn Leu
    50                  55                  60
Met Glu Gly Ile Glu Arg Asn Leu Leu Thr Lys Asn Arg Asp Arg
65                  70                  75                  79
```

<210> 1058
<211> 458
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(458)
<223> X = any amino acid or stop code

<400> 1058

```
Gly Thr Ser Gly Val Gln Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn
 1               5                  10                  15
Leu Asp Leu Lys Glu Leu Val Glu Lys Leu Glu Lys Asn Glu Arg Lys
            20                  25                  30
Leu Lys Lys Gln Leu Lys Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu
        35                  40                  45
Ala Ala Gln Ala Leu Ala Gln Ser Glu Arg Lys Arg His Glu Leu Asn
    50                  55                  60
Arg Gln Val Thr Val Gln Arg Lys Glu Lys Asp Phe Gln Gly Met Leu
65                  70                  75                  80
Glu Tyr His Lys Glu Asp Glu Ala Leu Leu Ile Arg Asn Leu Val Thr
                85                  90                  95
Asp Leu Lys Pro Gln Met Leu Ser Gly Thr Val Pro Cys Leu Pro Ala
            100                 105                 110
Tyr Ile Leu Tyr Met Cys Ile Arg His Ala Asp Tyr Thr Asn Asp Asp
        115                 120                 125
Leu Lys Val His Ser Leu Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys
    130                 135                 140
Val Leu Lys Lys His Asn Asp Asp Phe Glu Met Thr Ser Phe Trp Leu
145                 150                 155                 160
Ser Asn Thr Cys Arg Leu Leu His Cys Leu Lys Gln Tyr Ser Gly Asp
                165                 170                 175
Glu Gly Phe Met Thr Gln Asn Thr Ala Lys Gln Asn Glu His Cys Leu
            180                 185                 190
```

```
Lys Asn Phe Asp Leu Thr Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser
        195                 200                 205
Ile Gln Ile Tyr Gln Gln Leu Ile Lys Ile Ala Glu Gly Val Leu Gln
    210                 215                 220
Pro Met Ile Val Ser Ala Met Leu Glu Asn Xaa Ser Ile Gln Gly Leu
225                 230                 235                 240
Ser Gly Val Lys Pro Thr Gly Ser Gln Lys His Ser Ser Ser Met Ala
                245                 250                 255
Asp Glu Asp Asn Ser Tyr Arg Leu Glu Ala Ile Ile Arg Gln Met Asn
            260                 265                 270
Ala Phe His Thr Val Met Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile
        275                 280                 285
Leu Gln Val Phe Lys Gln Leu Phe Tyr Met Ile Asn Ala Val Thr Leu
    290                 295                 300
Asn Asp Leu Leu Leu Arg Lys Asp Val Cys Ser Trp Ser Thr Gly Met
305                 310                 315                 320
Gln Leu Arg Tyr Asn Ile Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg
                325                 330                 335
Asn Leu His Gln Ser Gly Ala Val Gln Thr Met Glu Pro Leu Ile Gln
            340                 345                 350
Ala Ala Gln Leu Leu Gln Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu
        355                 360                 365
Ala Ile Cys Ser Leu Cys Thr Ser Leu Ser Thr Gln Gln Ile Val Lys
    370                 375                 380
Ile Leu Asn Leu Tyr Thr Pro Leu Asn Glu Phe Glu Glu Arg Val Thr
385                 390                 395                 400
Val Ala Phe Ile Arg Thr Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp
                405                 410                 415
Pro Gln Gln Leu Leu Leu Asp Ala Lys His Met Phe Pro Val Leu Phe
            420                 425                 430
Pro Phe Asn Pro Ser Ser Leu Thr Met Asp Ser Ile His Ile Pro Ala
        435                 440                 445
Cys Leu Asn Leu Glu Phe Leu Asn Glu Val
    450                 455         458
```

<210> 1059
<211> 82
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(82)
<223> X = any amino acid or stop code

<400> 1059

```
His Glu Glu Asn Thr Ile Leu Lys Ala Ala Glu Val Gln Val Pro Pro
  1               5                  10                  15
Lys Xaa Val Val Thr Pro Glu Ala Lys Ala Phe Ile Xaa Arg Cys Leu
            20                  25                  30
Ala Tyr Gln Lys Glu Asp Cys Ile Asp Ala Gln Gln Leu Ala Cys Asp
        35                  40                  45
Pro Tyr Leu Leu His Tyr Ile Gln Lys Leu Val Phe Val Ser Ser Pro
    50                  55                  60
Ala Gly Ala Ala Ile Ala Ser Thr Phe Gly Val Ser Asn Ser Cys Ser
65                  70                  75                  80
Ser Asn
```

<210> 1060
<211> 277
<212>Amino acid
<213> Homo sapiens

<400> 1060

```
Gly Thr Thr Asp Glu Ile Met Thr Arg Trp Ala Arg Val Ser Thr Thr
 1               5                  10                  15
Tyr Asn Lys Arg Pro Leu Pro Ala Thr Ser Trp Glu Asp Met Lys Lys
            20                  25                  30
Gly Ser Phe Glu Gly Thr Ser Gln Asn Leu Pro Lys Arg Lys Gln Leu
        35                  40                  45
Glu Ala Asn Arg Leu Ser Leu Lys Asn Asp Ala Pro Gln Ala Lys His
    50                  55                  60
Lys Lys Asn Lys Lys Lys Lys Glu Tyr Leu Asn Glu Asp Val Asn Gly
65                  70                  75                  80
Phe Met Glu Tyr Leu Arg Gln Asn Ser Gln Met Val His Asn Gly Gln
                85                  90                  95
Ile Ile Ala Thr Asp Ser Glu Glu Val Arg Glu Glu Ile Ala Val Ala
            100                 105                 110
Leu Lys Lys Asp Ser Arg Arg Glu Gly Arg Arg Leu Lys Arg Gln Ala
        115                 120                 125
Ala Lys Lys Asn Ala Met Val Cys Phe His Cys Arg Lys Pro Gly His
    130                 135                 140
Gly Ile Ala Asp Cys Pro Ala Ala Leu Glu Asn Gln Asp Met Gly Thr
145                 150                 155                 160
Gly Ile Cys Tyr Arg Cys Gly Ser Thr Glu His Glu Ile Thr Lys Cys
                165                 170                 175
Lys Ala Lys Val Asp Pro Ala Leu Gly Glu Phe Pro Phe Ala Lys Cys
            180                 185                 190
Phe Val Cys Gly Glu Met Gly His Leu Ser Arg Ser Cys Pro Asp Asn
        195                 200                 205
Pro Lys Gly Leu Tyr Ala Asp Gly Gly Gly Cys Lys Leu Cys Gly Ser
    210                 215                 220
Val Glu His Leu Lys Lys Asp Cys Pro Glu Ser Gln Asn Ser Glu Arg
225                 230                 235                 240
Met Val Thr Val Gly Arg Trp Ala Lys Gly Met Ser Ala Asp Tyr Glu
                245                 250                 255
Glu Ile Leu Asp Val Pro Lys Pro Gln Lys Pro Lys Thr Lys Ile Pro
            260                 265                 270
Lys Val Val Asn Phe
        275     277
```

<210> 1061
<211> 95
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(95)
<223> X = any amino acid or stop code

<400> 1061

```
Asp His Val Arg Lys Ser Leu Leu Lys Asn Arg Ala Glu Asn Ile Val
 1               5                  10                  15
Asn Ile Phe Lys Cys Asn Val Val Ser Leu Pro Asn Leu Pro Ala Phe
            20                  25                  30
Gly Gln Ala Gln Trp Leu Thr Pro Val Ile Pro Ala Leu Trp Glu Ala
        35                  40                  45
Glu Val Gly Gly Ser Xaa Gly Gln Glu Ile Glu Thr Ile Leu Ala Asn
    50                  55                  60
Ala Val Lys Ser Pro Phe Leu Leu Lys Ile Gln Lys Lys Lys Ile Ser
65                  70                  75                  80
Arg Ala Trp Trp Arg Ala Pro Val Ser Pro Arg Tyr Ser Gly Gly
                85                  90                  95
```

<210> 1062
<211> 259
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(259)
<223> X = any amino acid or stop code

<400> 1062

```
Ser Asp Ala Trp Ala Asp Ala Trp Ala Arg Ser Leu Ser Val Ser Pro
 1               5                  10                  15
Ser Ser Tyr Pro Glu Leu His Thr Glu Val Pro Leu Ser Val Leu Ile
            20                  25                  30
Leu Gly Leu Leu Val Val Phe Ile Leu Ser Val Cys Phe Gly Ala Gly
        35                  40                  45
Leu Phe Val Phe Val Leu Lys Arg Arg Lys Gly Val Pro Ser Val Pro
    50                  55                  60
Arg Asn Thr Asn Asn Leu Asp Val Ser Ser Phe Gln Leu Gln Tyr Gly
65                  70                  75                  80
Ser Tyr Asn Thr Glu Thr His Asp Lys Thr Asp Gly His Val Tyr Asn
                85                  90                  95
Tyr Ile Pro Pro Pro Val Val Gln Met Cys Gln Asn Pro Ile Tyr Met
            100                 105                 110
Ala Gly Arg Glu Gly Arg Pro Ser Ser Leu Leu Pro Lys Pro Gly Lys
        115                 120                 125
Glu Phe Gln Leu Leu Gly Asn Leu Glu Glu Lys Lys Glu Glu Pro Ala
    130                 135                 140
Thr Pro Ala Tyr Thr Ile Ser Ala Thr Glu Leu Leu Glu Lys Gln Ala
145                 150                 155                 160
Thr Pro Arg Glu Pro Glu Leu Leu Tyr Gln Asn Ile Ala Glu Pro Ser
                165                 170                 175
Gln Gly Thr Ser Thr Ala Gln Ala Xaa Ser Thr Ile Thr Phe Val Pro
            180                 185                 190
Tyr Leu Lys Gly Gln Phe Ala Pro Ser Tyr Glu Ser Arg Arg Gln Asn
        195                 200                 205
Gln Asp Arg Ile Asn Lys Thr Val Leu Tyr Gly Thr Pro Arg Lys Cys
    210                 215                 220
Phe Val Gly Gln Ser Lys Pro Asn His Pro Leu Leu Gln Ala Lys Pro
225                 230                 235                 240
Gln Ser Glu Pro Asp Tyr Leu Glu Val Leu Glu Lys Gln Thr Ala Ile
                245                 250                 255
Ser Gln Leu
        259
```

<210> 1063
<211> 498
<212>Amino acid
<213> Homo sapiens

<400> 1063

```
Ala Leu Cys His Ile Ala Val Gly Gln Gln Met Asn Leu His Trp Leu
  1               5                  10                  15
His Lys Ile Gly Leu Val Val Ile Leu Ala Ser Thr Val Val Ala Met
             20                  25                  30
Ser Ala Val Ala Gln Leu Trp Glu Asp Glu Trp Glu Val Leu Leu Ile
         35                  40                  45
Ser Leu Gln Gly Thr Ala Pro Phe Leu His Val Gly Ala Val Ala Ala
     50                  55                  60
Val Thr Met Leu Ser Trp Ile Val Ala Gly Gln Phe Ala Arg Ala Glu
 65                  70                  75                  80
Arg Thr Ser Ser Gln Val Thr Ile Leu Cys Thr Phe Phe Thr Val Val
                 85                  90                  95
Phe Ala Leu Tyr Leu Ala Pro Leu Thr Ile Ser Ser Pro Cys Ile Met
            100                 105                 110
Glu Lys Lys Asp Leu Gly Pro Lys Pro Ala Leu Ile Gly His Arg Gly
        115                 120                 125
Ala Pro Met Leu Ala Pro Glu His Thr Leu Met Ser Phe Arg Lys Ala
    130                 135                 140
Leu Glu Gln Lys Leu Tyr Gly Leu Gln Ala Asp Ile Thr Ile Ser Leu
145                 150                 155                 160
Asp Gly Val Pro Phe Leu Met His Asp Thr Thr Leu Arg Arg Thr Thr
                165                 170                 175
Asn Val Glu Glu Glu Phe Pro Glu Leu Ala Arg Arg Pro Ala Ser Met
            180                 185                 190
Leu Asn Trp Thr Thr Leu Gln Arg Leu Asn Ala Gly Gln Trp Phe Leu
        195                 200                 205
Lys Thr Asp Pro Phe Trp Thr Ala Ser Ser Leu Ser Pro Ser Asp His
    210                 215                 220
Arg Glu Ala Gln Asn Gln Ser Ile Cys Ser Leu Ala Glu Leu Leu Glu
225                 230                 235                 240
Leu Ala Lys Gly Asn Ala Thr Leu Leu Leu Asn Leu Arg Asp Pro Pro
                245                 250                 255
Arg Glu His Pro Tyr Arg Ser Ser Phe Ile Asn Val Thr Leu Glu Ala
            260                 265                 270
Val Leu His Ser Gly Phe Pro Gln His Gln Val Met Trp Leu Pro Ser
        275                 280                 285
Arg Gln Arg Pro Leu Val Arg Lys Val Ala Pro Gly Phe Gln Gln Thr
    290                 295                 300
Ser Gly Ser Lys Glu Ala Val Ala Ser Leu Arg Arg Gly His Ile Gln
305                 310                 315                 320
Arg Leu Asn Leu Arg Tyr Thr Gln Val Ser Arg Gln Glu Leu Arg Asp
                325                 330                 335
Tyr Ala Ser Trp Asn Leu Ser Val Asn Leu Tyr Thr Val Asn Ala Pro
            340                 345                 350
Trp Leu Phe Ser Leu Leu Trp Cys Ala Gly Val Pro Ser Val Thr Ser
        355                 360                 365
Asp Asn Ser His Thr Leu Ser Gln Val Pro Ser Pro Leu Trp Ile Met
    370                 375                 380
Pro Pro Asp Glu Tyr Cys Leu Met Trp Val Thr Ala Asp Leu Val Ser
385                 390                 395                 400
Phe Thr Leu Ile Val Gly Ile Phe Val Leu Gln Lys Trp Arg Leu Gly
                405                 410                 415
Gly Ile Arg Ser Tyr Asn Pro Glu Gln Ile Met Leu Ser Ala Ala Val
```

```
            420                 425                 430
Arg Arg Thr Ser Arg Asp Val Ser Ile Met Lys Glu Lys Leu Ile Phe
        435                 440                 445
Ser Glu Ile Ser Asp Gly Val Glu Val Ser Asp Val Leu Ser Val Cys
    450                 455                 460
Ser Asp Asn Ser Tyr Asp Thr Tyr Ala Asn Ser Thr Ala Thr Pro Val
465                 470                 475                 480
Gly Pro Arg Gly Gly Gly Ser His Thr Lys Thr Leu Ile Glu Arg Ser
                485                 490                 495
Gly Arg
    498
```

<210> 1064
<211> 374
<212>Amino acid
<213> Homo sapiens

<400> 1064

```
Asn Ser Ala Asp Tyr Gly Asp Gly Pro Asp Ser Ser Asp Ala Asp Pro
  1               5                  10                  15
Asp Ser Gly Thr Glu Glu Gly Val Leu Asp Phe Ser Asp Pro Phe Ser
            20                  25                  30
Thr Glu Val Lys Pro Arg Ile Leu Leu Met Gly Leu Arg Arg Ser Gly
        35                  40                  45
Lys Ser Ser Ile Gln Lys Val Val Phe His Lys Met Ser Pro Asn Glu
    50                  55                  60
Thr Leu Phe Leu Glu Ser Thr Asn Lys Ile Cys Arg Glu Asp Val Ser
65                  70                  75                  80
Asn Ser Ser Phe Val Asn Phe Gln Ile Trp Asp Phe Pro Gly Gln Ile
                85                  90                  95
Asp Phe Phe Asp Pro Thr Phe Asp Tyr Glu Met Ile Phe Arg Gly Thr
            100                 105                 110
Gly Ala Leu Ile Phe Val Ile Asp Ser Gln Asp Asp Tyr Met Glu Ala
        115                 120                 125
Leu Ala Arg Leu His Leu Thr Val Thr Arg Ala Tyr Lys Val Asn Thr
    130                 135                 140
Asp Ile Asn Phe Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp
145                 150                 155                 160
Asp His Lys Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp
                165                 170                 175
Asp Leu Ala Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu
            180                 185                 190
Thr Ser Ile Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val
        195                 200                 205
Gln Lys Leu Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile
    210                 215                 220
Phe Ile Ser Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val
225                 230                 235                 240
Ser Lys Ile Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr
                245                 250                 255
Tyr Glu Leu Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys
            260                 265                 270
Ile Tyr Gly Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu
        275                 280                 285
Ser Thr Ala Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys
    290                 295                 300
Glu Val Thr Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser
305                 310                 315                 320
Phe Glu Arg Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys
```

```
                325                 330                 335
Ala Ile His Glu Val Phe Glu Val Arg Met Lys Val Val Lys Ser Arg
            340                 345                 350
Lys Val Gln Asn Arg Leu Gln Lys Lys Lys Arg Ala Thr Pro Asn Gly
        355                 360                 365
Thr Pro Arg Val Leu Leu
    370             374
```

<210> 1065
<211> 278
<212>Amino acid
<213> Homo sapiens

<400> 1065

```
Arg Thr Arg Gly Arg Asp Pro Gly Ala Gly Phe Arg Arg Thr Ala Asn
  1               5                  10                  15
Lys Arg Cys Cys Arg Arg Arg Phe Leu Ile Gly Cys Gly Trp Leu Pro
             20                  25                  30
Leu Arg Ser Asp Trp Pro Leu Val Ser Lys Met Leu Ser Lys Gly Leu
         35                  40                  45
Lys Arg Lys Arg Glu Glu Glu Glu Glu Lys Glu Pro Leu Ala Val Asp
     50                  55                  60
Ser Trp Trp Leu Asp Pro Gly His Ala Ala Val Ala Gln Ala Pro Pro
 65                  70                  75                  80
Ala Val Ala Ser Ser Ser Leu Phe Asp Leu Ser Val Leu Lys Leu His
                85                  90                  95
His Ser Leu Gln Gln Ser Glu Pro Asp Leu Arg His Leu Val Leu Val
            100                 105                 110
Val Asn Thr Leu Arg Arg Ile Gln Ala Ser Met Ala Pro Ala Ala Ala
        115                 120                 125
Leu Pro Pro Val Pro Ser Pro Pro Ala Ala Pro Ser Val Ala Asp Asn
    130                 135                 140
Leu Leu Ala Ser Ser Asp Ala Ala Leu Ser Ala Ser Met Ala Ser Leu
145                 150                 155                 160
Leu Glu Asp Leu Ser His Ile Glu Gly Leu Ser Gln Ala Pro Gln Pro
                165                 170                 175
Leu Ala Asp Glu Gly Pro Pro Gly Arg Ser Ile Gly Gly Ala Ala Pro
            180                 185                 190
Ser Leu Gly Ala Leu Asp Leu Leu Gly Pro Ala Thr Gly Cys Leu Leu
        195                 200                 205
Asp Asp Gly Leu Glu Gly Leu Phe Glu Asp Ile Asp Thr Ser Met Tyr
    210                 215                 220
Asp Asn Glu Leu Trp Ala Pro Ala Ser Glu Gly Leu Lys Pro Gly Pro
225                 230                 235                 240
Glu Asp Gly Pro Gly Lys Glu Glu Ala Pro Glu Leu Asp Glu Ala Glu
                245                 250                 255
Leu Asp Tyr Leu Met Asp Val Leu Val Gly Thr Gln Ala Leu Glu Arg
            260                 265                 270
Pro Pro Gly Pro Gly Arg
        275             278
```

<210> 1066
<211> 502
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(502)
<223> X = any amino acid or stop code

<400> 1066

```
Leu Gln Glu Val Lys Ala Arg Arg Asn Thr Leu His Lys Glu Lys Asp
 1               5                  10                  15
His Leu Val Asn Asp Tyr Glu Gln Asn Met Lys Leu Leu Gln Thr Lys
            20                  25                  30
Tyr Asp Ala Asp Ile Asn Leu Leu Lys Gln Glu His Ala Leu Ser Ala
        35                  40                  45
Ser Lys Ala Ser Ser Met Ile Glu Glu Leu Glu Gln Asn Val Cys Gln
    50                  55                  60
Leu Lys Gln Gln Leu Gln Glu Ser Glu Leu Gln Arg Lys Gln Gln Leu
65                  70                  75                  80
Arg Asp Gln Glu Asn Lys Phe Gln Met Glu Lys Ser His Leu Lys His
                85                  90                  95
Ile Tyr Glu Lys Lys Ala His Asp Leu Gln Ser Glu Leu Asp Lys Gly
            100                 105                 110
Lys Glu Asp Thr Gln Lys Lys Ile His Lys Phe Glu Glu Ala Leu Lys
        115                 120                 125
Trp Lys Lys Trp Arg Gln Ile Xaa Leu Asp Pro Asn Leu Leu Arg Glu
    130                 135                 140
Lys Gln Ser Lys Glu Phe Leu Trp Gln Leu Glu Asp Ile Arg Gln Arg
145                 150                 155                 160
Tyr Glu Gln Gln Ile Val Glu Leu Lys Leu Glu His Glu Gln Glu Lys
                165                 170                 175
Thr His Leu Leu Gln Gln His Asn Ala Glu Lys Asp Ser Leu Val Arg
            180                 185                 190
Asp His Glu Arg Glu Ile Glu Asn Leu Glu Lys Gln Leu Arg Ala Ala
        195                 200                 205
Asn Met Glu His Glu Asn Gln Ile Gln Glu Phe Lys Lys Arg Asp Ala
    210                 215                 220
Gln Val Ile Ala Asp Met Glu Ala Gln Val His Lys Leu Arg Glu Glu
225                 230                 235                 240
Leu Ile Asn Val Asn Ser Gln Arg Lys Gln Gln Leu Val Glu Leu Gly
                245                 250                 255
Leu Leu Arg Glu Glu Glu Lys Gln Arg Ala Thr Arg Glu His Glu Ile
            260                 265                 270
Val Val Asn Lys Leu Lys Ala Glu Ser Glu Lys Met Lys Ile Glu Leu
        275                 280                 285
Lys Lys Thr His Ala Ala Glu Thr Glu Met Thr Leu Glu Lys Ala Asn
    290                 295                 300
Ser Lys Leu Lys Gln Ile Glu Lys Glu Tyr Thr Gln Lys Leu Ala Lys
305                 310                 315                 320
Ser Ser Gln Ile Ile Ala Glu Leu Gln Thr Thr Ile Ser Ser Leu Lys
                325                 330                 335
Glu Glu Asn Ser Gln Gln Gln Leu Ala Ala Glu Arg Arg Leu Gln Asp
            340                 345                 350
Val Arg Gln Lys Phe Glu Asp Glu Lys Lys Gln Leu Ile Arg Asp Asn
        355                 360                 365
Asp Gln Ala Ile Lys Val Leu Gln Asp Glu Leu Glu Asn Arg Ser Asn
    370                 375                 380
Gln Val Arg Cys Ala Glu Lys Lys Leu Gln His Lys Glu Leu Glu Ser
385                 390                 395                 400
Gln Glu Gln Ile Thr Tyr Ile Arg Gln Glu Tyr Glu Thr Lys Leu Lys
                405                 410                 415
Gly Leu Met Pro Ala Ser Leu Arg Gln Glu Leu Glu Asp Thr Ile Ser
            420                 425                 430
Ser Leu Lys Ser Gln Val Asn Phe Leu Gln Lys Arg Ala Ser Ile Leu
        435                 440                 445
```

```
Gln Glu Glu Arg Asp Tyr Ile Ser Arg Gln Lys Val Gln Pro Ile Ser
    450                 455                 460
Arg Xaa Leu His Glu Arg Met Gln Arg Met Arg Ile Ser Arg Leu Cys
465                 470                 475                 480
Cys Gly Thr Ser Ser Ser Arg Phe Glu Asp Leu Asp Ile Val Asn Cys
                485                 490                 495
Glu Ile Ser Gly Ile Phe
            500     502
```

<210> 1067
<211> 301
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(301)
<223> X = any amino acid or stop code

<400> 1067

```
Val Ile Asn Leu Val Tyr Leu Ile Ser Ser Pro Arg Pro Glu Leu Lys
  1                 5                  10                  15
Pro Val Asp Lys Glu Ser Glu Val Val Met Lys Phe Pro Asp Gly Phe
             20                  25                  30
Glu Lys Phe Ser Pro Pro Ile Leu Gln Leu Asp Glu Val Asp Phe Tyr
         35                  40                  45
Tyr Asp Pro Lys His Val Ile Phe Ser Arg Leu Ser Val Ser Ala Asp
     50                  55                  60
Leu Glu Ser Arg Ile Cys Val Val Gly Glu Asn Gly Ala Gly Lys Ser
 65                  70                  75                  80
Thr Met Leu Lys Leu Leu Leu Gly Asp Leu Ala Pro Val Arg Gly Ile
                85                  90                  95
Arg His Ala His Arg Asn Leu Lys Ile Gly Tyr Phe Ser Gln His His
            100                 105                 110
Val Glu Gln Leu Asp Leu Asn Val Gln Cys Leu Trp Glu Leu Ala Gly
        115                 120                 125
His Ala Ser Phe Pro Gly Arg Pro Glu Glu Glu Tyr Arg His Gln Leu
    130                 135                 140
Gly Phe Gly Met Gly Ile Ser Gly Glu Leu Ala Met Arg Pro Leu Cys
145                 150                 155                 160
Gln Pro Val Leu Gly Ala Arg Lys Lys Pro Lys Trp Pro Phe Ala Gln
                165                 170                 175
Met Asp Tyr Cys Pro Ala Pro Thr Phe Tyr Ile Leu Asp Glu Pro Thr
            180                 185                 190
Asn His Leu Gly His Gly Arg Ala Ile Glu Ala Leu Gly Pro Cys Leu
        195                 200                 205
Gln Thr Ile Ser Gly Val Gly Val Ile Leu Val Ser His Glu Xaa Ser
    210                 215                 220
Ala Leu Ser Arg Leu Val Cys Arg Glu Leu Trp Val Cys Xaa Gly Gly
225                 230                 235                 240
Gly Val Thr Arg Val Glu Arg Lys Asp Phe Asp Gln Tyr Arg Ala Leu
                245                 250                 255
Leu Gln Gly Thr Val Ser Ala Arg Glu Gly Phe Pro Leu Gly Pro Pro
            260                 265                 270
Arg Leu Lys Asp Ser Pro Arg Asp Met Gly Leu Val Ser Gln Thr Pro
        275                 280                 285
Trp Gly His His Val Gly Tyr Pro Leu Pro Gly Arg Gly
    290                 295                 300 301
```

<210> 1068
<211> 215
<212>Amino acid
<213> Homo sapiens

<400> 1068

```
Cys Ser Ala Val Glu Val Lys Met Ala Ala Arg Thr Ala Phe Gly Ala
 1               5                  10                  15
Val Cys Arg Arg Leu Trp Gln Gly Leu Gly Asn Phe Ser Val Asn Thr
            20                  25                  30
Ser Lys Gly Asn Thr Ala Lys Asn Gly Gly Leu Leu Leu Ser Thr Asn
        35                  40                  45
Met Lys Trp Val Gln Phe Ser Asn Leu His Val Asp Val Pro Lys Asp
    50                  55                  60
Leu Thr Lys Pro Val Val Thr Ile Ser Asp Glu Pro Asp Ile Leu Tyr
65                  70                  75                  80
Lys Arg Leu Ser Val Leu Val Lys Gly His Asp Lys Ala Val Leu Asp
                85                  90                  95
Ser Tyr Glu Tyr Phe Ala Val Leu Ala Ala Lys Glu Leu Gly Ile Ser
            100                 105                 110
Ile Lys Val His Glu Pro Pro Arg Lys Ile Glu Arg Phe Thr Leu Leu
        115                 120                 125
Gln Ser Val His Ile Tyr Lys Lys His Arg Val Gln Tyr Glu Met Arg
    130                 135                 140
Thr Leu Tyr Arg Cys Leu Glu Leu Glu His Leu Thr Gly Ser Thr Ala
145                 150                 155                 160
Asp Val Tyr Leu Glu Tyr Ile Gln Arg Asn Leu Pro Glu Gly Val Ala
                165                 170                 175
Met Glu Val Thr Lys Phe Cys Phe Phe Ile Phe Leu Thr Gln Leu Glu
            180                 185                 190
Gln Leu Pro Glu His Ile Lys Glu Pro Ile Trp Glu Thr Leu Ser Glu
        195                 200                 205
Glu Lys Glu Glu Ser Lys Ser
    210                 215
```

<210> 1069
<211> 274
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(274)
<223> X = any amino acid or stop code

<400> 1069

```
Asp Phe Trp Asp Thr Ala Gly Gln Glu Arg Phe Gln Ser Met His Ala
 1               5                  10                  15
Ser Tyr Tyr His Lys Thr His Ala Cys Ile Met Val Phe Asp Val Gln
            20                  25                  30
Arg Lys Val Thr His Arg Asn Leu Ser Thr Trp Tyr Thr Glu Leu Arg
        35                  40                  45
Glu Phe Arg Pro Glu Ile Pro Cys Ile Val Val Ala Asn Lys Ile Asp
    50                  55                  60
```

```
Gly Gly Ala Ile Pro Ala Pro Gly Cys Xaa Gln Phe Thr Gly Asp Leu
 65                  70                  75                  80
Pro Ser Tyr Ile Ser Ser Ser Ile Pro Arg Ala Gly Asn Leu Gln Xaa
                85                  90                  95
Leu Val Leu Pro Pro Thr Ile Arg Tyr Asn Pro Trp Leu Val Ala Cys
            100                 105                 110
Ile Leu Pro Thr Leu Xaa Arg Ser Gln Leu Ser Arg Pro Ala Leu Phe
        115                 120                 125
Pro Arg His Arg Ser Leu Leu Thr Glu Leu Phe Leu Gly Pro Val Ser
    130                 135                 140
Gln Ser Ser Leu Pro Ile Pro Leu Ser Gly Met Lys Ala Ser Ser Gly
145                 150                 155                 160
Pro Pro Leu Gln Thr Phe Phe Pro Ser Leu Asp Arg Gln Thr Asn Val
                165                 170                 175
Leu Pro Ser Leu Tyr Ala Asp Ile Asn Val Thr Gln Lys Ser Phe Asn
            180                 185                 190
Phe Ala Lys Lys Phe Ser Leu Pro Leu Tyr Phe Val Ser Ala Ala Asp
        195                 200                 205
Gly Thr Asn Val Val Lys Leu Phe Asn Asp Ala Ile Arg Leu Ala Val
    210                 215                 220
Ser Tyr Lys Gln Asn Ser Gln Asp Phe Met Asp Glu Ile Phe Gln Glu
225                 230                 235                 240
Leu Glu Asn Phe Ser Leu Glu Gln Glu Glu Glu Asp Val Pro Asp Gln
                245                 250                 255
Glu Gln Ser Ser Ser Ile Glu Thr Pro Ser Glu Glu Val Ala Ser Pro
            260                 265                 270
His Ser
    274
```

<210> 1070
<211> 368
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(368)
<223> X = any amino acid or stop code

<400> 1070

```
Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp
  1                 5                  10                  15
Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp
             20                  25                  30
Phe Pro Glu Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser
         35                  40                  45
Ile Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu
     50                  55                  60
Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro
 65                  70                  75                  80
Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln Met Ile
                85                  90                  95
Phe Ala Gln Ala Leu Val Cys Arg His Leu Gly Arg Asp Trp Arg Trp
            100                 105                 110
Thr Gln Arg Lys Arg Gln Pro Asp Ser Tyr Phe Ser Val Leu Asn Ala
        115                 120                 125
Phe Ile Asp Arg Lys Asp Ser Tyr Tyr Ser Ile His Gln Ile Ala Gln
    130                 135                 140
Met Gly Val Gly Glu Gly Lys Ser Ile Gly Gln Trp Tyr Gly Pro Asn
```

```
145                 150                 155                 160
Thr Val Ala Gln Val Leu Lys Lys Leu Ala Val Phe Asp Thr Trp Ser
                165                 170                 175
Ser Leu Ala Val His Ile Ala Met Asp Asn Thr Val Val Met Glu Glu
            180                 185                 190
Ile Arg Arg Leu Cys Arg Thr Ser Val Pro Cys Ala Gly Ala Thr Ala
        195                 200                 205
Phe Pro Ala Asp Ser Asp Arg His Cys Asn Gly Phe Pro Ala Gly Ala
    210                 215                 220
Glu Val Thr Asn Arg Pro Ser Pro Trp Arg Pro Leu Val Leu Leu Ile
225                 230                 235                 240
Pro Leu Arg Leu Gly Leu Thr Asp Ile Asn Glu Ala Tyr Val Glu Thr
                245                 250                 255
Leu Lys His Cys Phe Met Met Pro Gln Ser Leu Gly Val Ile Gly Gly
            260                 265                 270
Lys Pro Asn Ser Ala His Tyr Phe Ile Gly Xaa Val Gly Glu Glu Leu
        275                 280                 285
Ile Tyr Leu Asp Pro His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp
    290                 295                 300
Gly Cys Phe Ile Pro Asp Glu Ser Phe His Cys Gln His Pro Pro Cys
305                 310                 315                 320
Arg Met Ser Ile Ala Glu Leu Asp Pro Ser Ile Ala Val Val Arg Gly
                325                 330                 335
Gly His Leu Ser Thr Gln Ala Phe Gly Ala Glu Cys Cys Leu Gly Met
            340                 345                 350
Thr Arg Lys Thr Phe Gly Phe Leu Arg Phe Phe Phe Ser Met Leu Gly
        355                 360                 365         368
```

<210> 1071
<211> 81
<212>Amino acid
<213> Homo sapiens

<400> 1071

```
Ala Leu Cys Val Val Pro Phe Asn Thr Phe His Asn Asp Phe Leu Leu
  1               5                  10                  15
Leu Asp Lys Glu Gly Thr Leu Asp Pro Val Met Asp Ser Phe Ser Thr
             20                  25                  30
His Trp Thr Thr Ile Gly Pro Ala Asp Met Phe Phe Ser Phe Arg Gln
         35                  40                  45
His Tyr Lys Asn Phe Lys Ser His Gly Thr Asn Pro Ser Lys Ser Val
     50                  55                  60
Trp Ala His Ala Thr Cys Gln Ser Cys Ala Phe Pro Asn Leu Leu Gly
 65                  70                  75                  80
Trp
 81
```

<210> 1072
<211> 494
<212>Amino acid
<213> Homo sapiens

<400> 1072

```
Thr Arg Leu Ala Glu Phe Gly Thr Arg Asp Pro Cys Ala Gln Ala Pro
 1               5                  10                  15
Cys Glu Gln Gln Cys Glu Pro Gly Gly Pro Gln Gly Tyr Ser Cys His
            20                  25                  30
Cys Arg Leu Gly Phe Arg Pro Ala Glu Asp Asp Pro His Arg Cys Val
        35                  40                  45
Asp Thr Asp Glu Cys Gln Ile Ala Gly Val Cys Gln Gln Met Cys Val
    50                  55                  60
Asn Tyr Val Gly Gly Phe Glu Cys Tyr Cys Ser Glu Gly His Glu Leu
65                  70                  75                  80
Glu Ala Asp Gly Ile Ser Cys Ser Pro Ala Gly Ala Met Gly Ala Gln
                85                  90                  95
Ala Ser Gln Asp Leu Gly Asp Glu Leu Leu Asp Asp Gly Glu Asp Glu
            100                 105                 110
Glu Asp Glu Asp Glu Ala Trp Lys Ala Phe Asn Gly Gly Trp Thr Glu
        115                 120                 125
Met Pro Gly Ile Leu Trp Met Glu Pro Thr Gln Pro Pro Asp Phe Ala
    130                 135                 140
Leu Ala Tyr Arg Pro Ser Phe Pro Glu Asp Arg Glu Pro Gln Ile Pro
145                 150                 155                 160
Tyr Pro Glu Pro Thr Trp Pro Pro Pro Leu Ser Ala Pro Arg Val Pro
                165                 170                 175
Tyr His Ser Ser Val Leu Ser Val Thr Arg Pro Val Val Val Ser Ala
            180                 185                 190
Thr His Pro Thr Leu Pro Ser Ala His Gln Pro Pro Val Ile Pro Ala
        195                 200                 205
Thr His Pro Ala Leu Ser Arg Asp His Gln Ile Pro Val Ile Ala Ala
    210                 215                 220
Asn Tyr Pro Asp Leu Pro Ser Ala Tyr Gln Pro Gly Ile Leu Ser Val
225                 230                 235                 240
Ser His Ser Ala Gln Pro Pro Ala His Gln Pro Pro Met Ile Ser Thr
                245                 250                 255
Lys Tyr Pro Glu Leu Phe Pro Ala His Gln Ser Pro Met Phe Pro Asp
            260                 265                 270
Thr Arg Val Ala Gly Thr Gln Thr Thr Thr His Leu Pro Gly Ile Pro
        275                 280                 285
Pro Asn His Ala Pro Leu Val Thr Thr Leu Gly Ala Gln Leu Pro Pro
    290                 295                 300
Gln Ala Pro Asp Ala Leu Val Leu Arg Thr Gln Ala Thr Gln Leu Pro
305                 310                 315                 320
Ile Ile Pro Thr Ala Gln Pro Ser Leu Thr Thr Thr Ser Arg Ser Pro
                325                 330                 335
Val Ser Pro Ala His Gln Ile Ser Val Pro Ala Ala Thr Gln Pro Ala
            340                 345                 350
Ala Leu Pro Thr Leu Leu Pro Ser Gln Ser Pro Thr Asn Gln Thr Ser
        355                 360                 365
Pro Ile Ser Pro Thr His Pro His Ser Lys Ala Pro Gln Ile Pro Arg
    370                 375                 380
Glu Asp Gly Pro Ser Pro Lys Leu Ala Leu Trp Leu Pro Ser Pro Ala
385                 390                 395                 400
Pro Thr Ala Ala Pro Thr Ala Leu Gly Glu Ala Gly Leu Ala Glu His
                405                 410                 415
Ser Gln Arg Asp Asp Arg Trp Leu Leu Val Ala Leu Leu Val Pro Thr
            420                 425                 430
Cys Val Phe Leu Val Val Leu Leu Ala Leu Gly Ile Val Tyr Cys Thr
        435                 440                 445
Arg Cys Gly Pro His Ala Pro Asn Lys Arg Ile Thr Asp Cys Tyr Arg
    450                 455                 460
Trp Val Ile His Ala Gly Ser Lys Ser Pro Thr Glu Pro Met Pro Pro
465                 470                 475                 480
Arg Gly Ser Leu Thr Gly Val Gln Thr Cys Arg Thr Ser Val
                485                 490             494
```

<210> 1073
<211> 468
<212>Amino acid
<213> Homo sapiens

<400> 1073

```
Leu Arg Val Arg Arg Arg Pro His Leu Pro Ala Pro Pro Ala Leu Arg
  1               5                  10                  15
Ala Arg Arg Ser Asp Arg Arg Ser Ser Arg Ala Pro Ala Ala Phe Pro
            20                  25                  30
Pro Arg Pro Pro His Ala Ser Pro Ala Pro Gly Pro Ala Met Ala Gln
        35                  40                  45
Ala Val Trp Ser Arg Leu Gly Arg Ile Leu Trp Leu Ala Cys Leu Leu
    50                  55                  60
Pro Trp Ala Pro Ala Gly Val Ala Ala Gly Leu Tyr Glu Leu Asn Leu
65                  70                  75                  80
Thr Thr Asp Ser Pro Ala Thr Thr Gly Ala Val Val Thr Ile Ser Ala
                85                  90                  95
Ser Leu Val Ala Lys Asp Asn Gly Ser Leu Ala Leu Pro Ala Asp Ala
            100                 105                 110
His Leu Tyr Arg Phe His Trp Ile His Thr Pro Leu Val Leu Thr Gly
        115                 120                 125
Lys Met Glu Lys Gly Leu Ser Ser Thr Ile Arg Val Val Gly His Val
    130                 135                 140
Pro Gly Glu Phe Pro Val Ser Val Trp Val Thr Ala Ala Asp Cys Trp
145                 150                 155                 160
Met Cys Gln Pro Val Ala Arg Gly Phe Val Val Leu Pro Ile Thr Glu
                165                 170                 175
Phe Leu Val Gly Asp Leu Val Val Thr Gln Asn Thr Ser Leu Pro Trp
            180                 185                 190
Pro Ser Ser Tyr Leu Thr Lys Thr Val Leu Lys Val Ser Phe Leu Leu
        195                 200                 205
His Asp Pro Ser Asn Phe Leu Lys Thr Ala Leu Phe Leu Tyr Ser Trp
    210                 215                 220
Asp Phe Gly Asp Gly Thr Gln Met Val Thr Glu Asp Ser Val Val Tyr
225                 230                 235                 240
Tyr Asn Tyr Ser Ile Ile Gly Thr Phe Thr Val Lys Leu Lys Val Val
                245                 250                 255
Ala Glu Trp Glu Glu Val Glu Pro Asp Ala Thr Arg Ala Val Lys Gln
            260                 265                 270
Lys Thr Gly Asp Phe Ser Ala Ser Leu Lys Leu Gln Glu Thr Leu Arg
        275                 280                 285
Gly Ile Gln Val Leu Gly Pro Thr Leu Ile Gln Thr Phe Gln Lys Met
    290                 295                 300
Thr Val Thr Leu Asn Phe Leu Gly Ser Pro Pro Leu Thr Val Cys Trp
305                 310                 315                 320
Arg Leu Lys Pro Glu Cys Leu Pro Leu Glu Glu Gly Glu Cys His Pro
                325                 330                 335
Val Ser Val Ala Ser Thr Ala Tyr Asn Leu Thr His Thr Phe Arg Asp
            340                 345                 350
Pro Gly Asp Tyr Cys Phe Ser Ile Arg Ala Glu Asn Ile Ile Ser Lys
        355                 360                 365
Thr His Gln Tyr His Lys Ile Gln Val Trp Pro Ser Arg Ile Gln Pro
    370                 375                 380
Ala Val Phe Ala Phe Pro Cys Ala Thr Leu Ile Thr Val Met Leu Ala
385                 390                 395                 400
Phe Ile Met Tyr Met Thr Leu Arg Asn Ala Thr Gln Gln Lys Asp Met
                405                 410                 415
Val Glu Asn Pro Glu Pro Pro Ser Gly Val Arg Cys Cys Cys Gln Met
```

```
            420                 425                 430
Cys Cys Gly Pro Phe Leu Leu Glu Thr Pro Ser Glu Tyr Leu Glu Ile
        435                 440                 445
Val Arg Glu Asn His Gly Leu Leu Pro Pro Leu Tyr Lys Ser Val Lys
    450                 455                 460
Thr Tyr Thr Val
465         468
```

<210> 1074
<211> 288
<212>Amino acid
<213> Homo sapiens

<400> 1074

```
Val Val Glu Phe Ala Phe Gln Leu Ser Ser Val Ser Val Cys Leu Thr
  1               5                  10                  15
Val Ser Phe Gly Trp Gln Leu Gly Thr Val Ser Ser Cys Leu Ser Arg
             20                  25                  30
Asp Trp Phe Leu Lys Gly Asn Leu Leu Ile Ile Ile Val Ser Val Leu
         35                  40                  45
Ile Ile Leu Pro Leu Ala Leu Met Lys His Leu Gly Tyr Leu Gly Tyr
     50                  55                  60
Thr Ser Gly Leu Ser Leu Thr Cys Met Leu Phe Phe Leu Val Ser Val
 65                  70                  75                  80
Ile Tyr Lys Lys Phe Gln Leu Gly Cys Ala Ile Gly His Asn Glu Thr
                 85                  90                  95
Ala Met Glu Ser Glu Ala Leu Val Gly Leu Pro Ser Gln Gly Leu Asn
            100                 105                 110
Ser Ser Cys Glu Ala Gln Met Phe Thr Val Asp Ser Gln Met Ser Tyr
        115                 120                 125
Thr Val Pro Ile Met Ala Phe Ala Phe Val Cys His Pro Glu Val Leu
    130                 135                 140
Pro Ile Tyr Thr Glu Leu Cys Arg Pro Ser Lys Arg Arg Met Gln Ala
145                 150                 155                 160
Val Ala Asn Val Ser Ile Gly Ala Met Phe Cys Met Tyr Gly Leu Thr
                165                 170                 175
Ala Thr Phe Gly Tyr Leu Thr Phe Tyr Ser Ser Val Lys Ala Glu Met
            180                 185                 190
Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile Leu Cys Val Arg Leu
        195                 200                 205
Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro Val Val Leu Phe Pro
    210                 215                 220
Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro Gly Lys Ala Phe Ser
225                 230                 235                 240
Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu Leu Val Leu Val Asn
                245                 250                 255
Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp Ile Phe Gly Val Ile
            260                 265                 270
Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile Leu Pro Ser Cys Ile
        275                 280                 285         288
```

<210> 1075
<211> 273
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(273)
<223> X = any amino acid or stop code

<400> 1075

```
Gly Ala Gly Ser Lys Ser Ser Met Met Gln Leu Met His Leu Glu Ser
  1               5                  10                  15
Phe Tyr Glu Lys Pro Pro Pro Gly Leu Ile Lys Glu Asp Asp Thr Lys
             20                  25                  30
Pro Glu Asp Cys Ile Pro Asp Val Pro Gly Asn Glu His Ala Arg Glu
         35                  40                  45
Phe Leu Ala His Thr Pro Thr Lys Gly Leu Trp Met Pro Leu Glu Lys
     50                  55                  60
Glu Val Lys Val Lys His Cys Thr Phe His Trp Ile Ala Ser Xaa Phe
 65                  70                  75                  80
Leu Gly Asp Gly Lys Phe Ile Pro Lys Ala Thr Arg Leu Lys Asp Val
                 85                  90                  95
Trp Val Ser Asn Xaa Phe Thr Cys Leu Phe Trp Asp Leu Thr Arg Phe
            100                 105                 110
Ile His Asp Cys Ile Phe Phe Xaa Asn Trp Ser Leu Met Asn Lys Asn
        115                 120                 125
Phe Asn Ile Ile Tyr Xaa Phe Phe Ile Ser Leu Arg Xaa Asn Thr Leu
    130                 135                 140
Ile Leu Gln Lys Tyr Phe Pro Phe Ser Leu Leu Leu Gly Trp His Cys
145                 150                 155                 160
Lys Trp Tyr Gly His Arg Thr Gly Tyr Lys Glu Cys Pro Phe Phe Ile
                165                 170                 175
Lys Asp Asn Gln Lys Leu Gln Gln Phe Arg Val Ala His Glu Asp Phe
            180                 185                 190
Met Tyr Asp Ile Ile Arg Asp Asn Lys Gln His Glu Lys Asn Val Arg
        195                 200                 205
Ile Gln Gln Leu Lys Gln Leu Leu Glu Asp Ser Thr Ser Gly Glu Asp
    210                 215                 220
Arg Ser Ser Ser Ser Ser Ser Glu Gly Lys Glu Lys His Lys Lys Lys
225                 230                 235                 240
Lys Lys Lys Glu Lys His Lys Lys Arg Lys Lys Glu Lys Lys Lys Lys
                245                 250                 255
Lys Lys Arg Lys His Lys Ser Ser Lys Ser Asn Glu Gly Ser Asp Ser
            260                 265                 270
Glu
273
```

<210> 1076
<211> 815
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(815)
<223> X = any amino acid or stop code

<400> 1076

```
Glu Ile Ala Gly Ala Ala Ala Glu Asn Met Leu Gly Ser Leu Leu Cys
```

```
  1               5                  10                  15
Leu Pro Gly Ser Gly Ser Val Leu Leu Asp Pro Cys Thr Gly Ser Thr
             20                  25                  30
Ile Ser Glu Thr Thr Ser Glu Ala Trp Ser Val Glu Val Leu Pro Ser
         35                  40                  45
Asp Ser Glu Ala Pro Asp Leu Lys Gln Glu Glu Arg Leu Gln Glu Leu
     50                  55                  60
Glu Ser Cys Ser Gly Leu Gly Ser Thr Ser Asp Asp Thr Asp Val Arg
 65                  70                  75                  80
Glu Val Ser Ser Arg Pro Ser Thr Pro Gly Leu Ser Val Val Ser Gly
                 85                  90                  95
Ile Ser Ala Thr Ser Glu Asp Ile Pro Asn Lys Ile Glu Asp Leu Arg
            100                 105                 110
Ser Glu Cys Ser Ser Asp Phe Gly Gly Lys Asp Ser Val Thr Ser Pro
        115                 120                 125
Asp Met Asp Glu Ile Thr His Asp Phe Leu Tyr Ile Leu Gln Pro Lys
    130                 135                 140
Gln His Phe Gln His Ile Glu Ala Glu Ala Asp Met Arg Ile Gln Leu
145                 150                 155                 160
Ser Ser Ser Ala His Gln Leu Thr Ser Pro Pro Ser Gln Ser Glu Ser
                165                 170                 175
Leu Leu Ala Met Phe Asp Pro Leu Ser Ser His Glu Gly Ala Ser Ala
            180                 185                 190
Val Val Arg Pro Lys Val His Tyr Ala Arg Pro Ser His Pro Pro Pro
        195                 200                 205
Asp Pro Pro Ile Leu Glu Gly Ala Val Gly Gly Asn Glu Ala Arg Leu
    210                 215                 220
Pro Asn Phe Gly Ser Pro Met Phe Xaa Leu Pro Ala Glu Met Glu Ala
225                 230                 235                 240
Phe Lys Gln Arg His Ser Tyr Thr Pro Glu Arg Leu Val Arg Ser Arg
                245                 250                 255
Ser Ser Asp Ile Val Ser Ser Val Arg Arg Pro Met Ser Asp Pro Ser
            260                 265                 270
Trp Asn Arg Arg Pro Gly Asn Glu Glu Arg Glu Leu Pro Pro Ala Ala
        275                 280                 285
Ala Ile Gly Ala Thr Ser Leu Val Ala Ala Pro His Ser Ser Ser Ser
    290                 295                 300
Ser Pro Ser Lys Asp Ser Ser Arg Gly Glu Thr Glu Glu Arg Lys Asp
305                 310                 315                 320
Ser Asp Asp Glu Lys Ser Asp Arg Asn Arg Pro Trp Trp Arg Lys Arg
                325                 330                 335
Phe Val Ser Ala Met Pro Lys Ala Pro Ile Pro Phe Arg Lys Lys Glu
            340                 345                 350
Lys Gln Glu Lys Asp Lys Asp Asp Leu Gly Pro Asp Arg Phe Ser Thr
        355                 360                 365
Leu Thr Asp Asp Pro Ser Pro Arg Leu Ser Ala Gln Ala Gln Val Ala
    370                 375                 380
Glu Asp Ile Leu Asp Lys Tyr Arg Asn Ala Ile Lys Arg Thr Ser Pro
385                 390                 395                 400
Ser Asp Gly Ala Met Ala Asn Tyr Glu Ser Thr Glu Val Met Gly Asp
                405                 410                 415
Gly Glu Ser Ala His Asp Ser Pro Arg Asp Glu Ala Leu Gln Asn Ile
            420                 425                 430
Ser Ala Asp Asp Leu Pro Asp Ser Ala Ser Gln Ala Ala His Pro Gln
        435                 440                 445
Asp Ser Ala Phe Ser Tyr Arg Asp Ala Lys Lys Lys Leu Arg Leu Ala
    450                 455                 460
Leu Cys Ser Ala Asp Ser Val Ala Phe Pro Val Leu Thr His Ser Thr
465                 470                 475                 480
Arg Asn Gly Leu Pro Asp His Thr Asp Pro Glu Asp Asn Glu Ile Val
                485                 490                 495
Cys Phe Leu Lys Val Gln Ile Ala Glu Ala Ile Asn Leu Gln Asp Lys
            500                 505                 510
Asn Leu Met Ala Gln Leu Gln Glu Thr Met Arg Cys Val Cys Arg Phe
```

```
        515                 520                 525
Asp Asn Arg Thr Cys Arg Lys Leu Leu Ala Ser Ile Ala Glu Asp Tyr
    530                 535                 540
Arg Lys Arg Ala Pro Tyr Ile Ala Tyr Leu Thr Arg Cys Arg Gln Gly
545                 550                 555                 560
Leu Gln Thr Thr Gln Ala His Leu Glu Arg Leu Leu Gln Arg Val Leu
                565                 570                 575
Arg Asp Lys Glu Val Ala Asn Arg Tyr Phe Thr Thr Val Cys Val Arg
            580                 585                 590
Leu Leu Leu Glu Ser Lys Glu Lys Lys Ile Arg Glu Phe Ile Gln Asp
        595                 600                 605
Phe Gln Lys Leu Thr Ala Ala Asp Asp Lys Thr Ala Gln Val Glu Asp
    610                 615                 620
Phe Leu Gln Phe Leu Tyr Gly Ala Met Ala Gln Asp Val Ile Trp Gln
625                 630                 635                 640
Asn Ala Ser Glu Glu Gln Leu Gln Asp Ala Gln Leu Ala Ile Glu Arg
                645                 650                 655
Ser Val Met Asn Arg Ile Phe Lys Leu Ala Phe Tyr Pro Asn Gln Asp
            660                 665                 670
Gly Asp Ile Leu Arg Asp Gln Val Leu His Glu His Ile Gln Arg Leu
        675                 680                 685
Ser Lys Val Val Thr Ala Asn His Arg Ala Leu Gln Ile Pro Glu Val
    690                 695                 700
Tyr Leu Arg Glu Ala Pro Trp Pro Ser Ala Gln Ser Glu Ile Arg Thr
705                 710                 715                 720
Ile Ser Ala Tyr Lys Thr Pro Arg Asp Lys Val Gln Cys Ile Leu Arg
                725                 730                 735
Met Cys Ser Thr Ile Met Asn Leu Leu Ser Leu Ala Asn Glu Asp Ser
            740                 745                 750
Val Pro Gly Ala Asp Asp Phe Val Pro Val Leu Val Phe Val Leu Ile
        755                 760                 765
Lys Ala Asn Pro Pro Cys Leu Leu Ser Thr Val Gln Tyr Ile Ser Ser
    770                 775                 780
Phe Tyr Ala Ser Cys Leu Ser Gly Glu Glu Ser Tyr Trp Trp Met Gln
785                 790                 795                 800
Phe Thr Ala Ala Val Glu Phe Ile Lys Thr Ile Asp Asp Arg Lys
                805                 810                 815
```

<210> 1077
<211> 256
<212>Amino acid
<213> Homo sapiens

<400> 1077

```
Trp Pro Met Ser Leu Ala Arg Gly His Gly Asp Thr Ala Ala Ser Thr
  1               5                  10                  15
Ala Ala Pro Leu Ser Glu Glu Gly Glu Val Thr Ser Gly Leu Gln Ala
            20                  25                  30
Leu Ala Val Glu Asp Thr Gly Gly Pro Ser Ala Ser Ala Gly Lys Ala
        35                  40                  45
Glu Asp Glu Gly Glu Gly Gly Arg Glu Glu Thr Glu Arg Glu Gly Ser
    50                  55                  60
Gly Gly Glu Glu Ala Gln Gly Glu Val Pro Ser Ala Gly Gly Glu Glu
65                  70                  75                  80
Pro Ala Glu Glu Asp Ser Glu Asp Trp Cys Val Pro Cys Ser Asp Glu
                85                  90                  95
Glu Val Glu Leu Pro Ala Asp Gly Gln Pro Trp Met Pro Pro Pro Ser
            100                 105                 110
Glu Ile Gln Arg Leu Tyr Glu Leu Leu Ala Ala His Gly Thr Leu Glu
```

```
        115                 120                 125
Leu Gln Ala Glu Ile Leu Pro Arg Arg Pro Pro Thr Pro Glu Ala Gln
    130                 135                 140
Ser Glu Glu Glu Arg Ser Asp Glu Glu Pro Glu Ala Lys Glu Glu Glu
145                 150                 155                 160
Glu Glu Lys Pro His Met Pro Thr Glu Phe Asp Phe Asp Asp Glu Pro
                165                 170                 175
Val Thr Pro Lys Asp Ser Leu Ile Asp Arg Arg Arg Thr Pro Gly Ser
            180                 185                 190
Ser Ala Arg Ser Gln Lys Arg Glu Ala Arg Leu Asp Lys Val Leu Ser
        195                 200                 205
Asp Met Lys Arg His Lys Lys Leu Glu Glu Gln Ile Leu Arg Thr Gly
    210                 215                 220
Arg Asp Leu Phe Ser Leu Asp Ser Glu Asp Pro Ser Pro Ala Ser Pro
225                 230                 235                 240
Pro Leu Arg Ser Ser Gly Ser Ser Leu Phe Pro Arg Gln Arg Lys Tyr
                245                 250                 255 256
```

<210> 1078
<211> 590
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(590)
<223> X = any amino acid or stop code

<400> 1078

```
Leu Gly Arg Gly Thr Phe Gly Gln Val Val Xaa Cys Trp Lys Arg Gly
  1               5                  10                  15
Thr Asn Glu Ile Val Ala Ile Lys Ile Leu Lys Asn His Pro Ser Tyr
            20                  25                  30
Ala Arg Gln Gly Gln Ile Glu Val Ser Ile Leu Ala Arg Leu Ser Thr
        35                  40                  45
Glu Ser Ala Asp Asp Tyr Asn Phe Val Arg Ala Tyr Glu Cys Phe Gln
    50                  55                  60
His Lys Asn His Thr Cys Leu Val Phe Glu Met Leu Glu Gln Asn Leu
65                  70                  75                  80
Tyr Asp Phe Leu Lys Gln Asn Lys Phe Ser Pro Leu Pro Leu Lys Tyr
                85                  90                  95
Ile Arg Pro Val Leu Gln Gln Val Ala Thr Ala Leu Met Lys Leu Lys
            100                 105                 110
Ser Leu Gly Leu Ile His Ala Asp Leu Lys Pro Glu Asn Ile Met Leu
        115                 120                 125
Val Asp Pro Ser Arg Gln Pro Tyr Arg Val Lys Val Ile Asp Phe Gly
    130                 135                 140
Ser Ala Ser His Val Ser Lys Ala Val Cys Ser Thr Tyr Leu Gln Ser
145                 150                 155                 160
Arg Tyr Tyr Arg Ala Pro Glu Ile Ile Leu Gly Leu Pro Phe Cys Glu
                165                 170                 175
Ala Ile Asp Met Trp Ser Leu Gly Cys Val Ile Ala Glu Leu Phe Leu
            180                 185                 190
Gly Trp Pro Leu Tyr Pro Gly Ala Ser Glu Tyr Asp Gln Ile Arg Tyr
        195                 200                 205
Ile Ser Gln Thr Gln Gly Leu Pro Ala Glu Tyr Leu Leu Ser Ala Gly
    210                 215                 220
```

```
Thr Lys Thr Thr Arg Phe Phe Asn Arg Asp Thr Asp Ser Pro Tyr Pro
225                 230                 235                 240
Leu Trp Arg Leu Lys Thr Pro Asp Asp His Glu Ala Glu Thr Gly Ile
                245                 250                 255
Lys Ser Lys Glu Ala Arg Lys Tyr Ile Phe Asn Cys Leu Asp Asp Met
            260                 265                 270
Ala Gln Val Asn Met Thr Thr Asp Leu Glu Gly Ser Asp Met Leu Val
        275                 280                 285
Glu Lys Ala Val Arg Arg Glu Phe Ile Asp Leu Leu Lys Lys Met Leu
    290                 295                 300
Ser Ile Asp Ser Val Lys Arg Phe Ser Pro Val Gly Ser Leu Asn His
305                 310                 315                 320
Pro Phe Val Thr Met Ser Leu Phe Leu Asp Phe Pro His Ser Thr His
                325                 330                 335
Val Lys Ser Cys Phe Gln Asn Met Glu Ile Cys Lys Arg Arg Val Asn
            340                 345                 350
Met Tyr Asp Thr Val Asn Gln Ser Lys Thr Pro Phe Ile Thr His Val
        355                 360                 365
Ala Pro Ser Thr Ser Thr Asn Leu Thr Met Thr Phe Asn Asn Gln Leu
    370                 375                 380
Thr Thr Val His Asn Gln Pro Ser Ala Ala Ser Met Ala Ala Val Ala
385                 390                 395                 400
Gln Arg Ser Met Pro Leu Gln Thr Gly Thr Ala Gln Ile Cys Ala Arg
                405                 410                 415
Pro Asp Pro Phe Gln Gln Ala Leu Ile Val Cys Pro Pro Gly Phe Gln
            420                 425                 430
Gly Leu Gln Ala Ser Pro Ser Lys His Ala Gly Tyr Ser Val Arg Met
        435                 440                 445
Glu Asn Ala Val Pro Ile Val Thr Gln Ala Pro Gly Ala Gln Pro Leu
    450                 455                 460
Gln Ile Gln Pro Gly Leu Leu Ala Gln Gln Ala Trp Pro Ser Gly Thr
465                 470                 475                 480
Gln Gln Ile Leu Leu Pro Pro Ala Trp Gln Gln Leu Thr Gly Val Ala
                485                 490                 495
Thr His Thr Ser Val Gln His Ala Ala Val Ile Pro Glu Thr Met Ala
            500                 505                 510
Gly Thr Gln Gln Leu Ala Asp Trp Arg Asn Thr His Ala His Gly Ser
        515                 520                 525
His Tyr Asn Pro Ile Met Gln Gln Pro Ala Leu Leu Thr Gly His Val
    530                 535                 540
Thr Leu Pro Ala Ala Gln Pro Leu Asn Val Gly Val Ala His Val Met
545                 550                 555                 560
Arg Gln Gln Pro Thr Ser Thr Thr Ser Ser Arg Lys Ser Lys Gln His
                565                 570                 575
Leu Tyr Cys Gly Arg Ala Arg Val Ser Lys Ile Ala Ser Arg
            580                 585                 590
```

<210> 1079
<211> 904
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(904)
<223> X = any amino acid or stop code

<400> 1079

```
Glu Phe Ala Ile Cys Arg Tyr Pro Leu Gly Met Ser Gly Gly Gln Ile
```

```
  1               5                  10                  15
Pro Asp Glu Asp Ile Thr Ala Ser Ser Gln Trp Ser Glu Ser Thr Ala
             20                  25                  30
Ala Lys Tyr Gly Arg Leu Asp Ser Glu Glu Gly Asp Gly Ala Trp Cys
         35                  40                  45
Pro Glu Ile Pro Val Glu Pro Asp Asp Leu Lys Glu Phe Leu Gln Ile
     50                  55                  60
Asp Leu His Thr Leu His Phe Ile Thr Leu Val Gly Thr Gln Gly Arg
 65                  70                  75                  80
His Ala Gly Gly His Gly Ile Glu Phe Ala Pro Met Tyr Lys Ile Asn
                 85                  90                  95
Tyr Ser Arg Asp Gly Thr Arg Trp Ile Ser Trp Arg Asn Arg His Gly
            100                 105                 110
Lys Gln Val Leu Asp Gly Asn Ser Asn Pro Tyr Asp Ile Phe Leu Lys
        115                 120                 125
Asp Leu Glu Pro Pro Ile Val Ala Arg Phe Val Arg Phe Ile Pro Val
    130                 135                 140
Thr Asp His Ser Met Asn Val Cys Met Arg Val Glu Leu Tyr Gly Cys
145                 150                 155                 160
Val Trp Leu Asp Gly Leu Val Ser Tyr Asn Ala Pro Ala Gly Gln Gln
                165                 170                 175
Phe Val Leu Pro Gly Gly Ser Ile Ile Tyr Leu Asn Asp Ser Val Tyr
            180                 185                 190
Asp Gly Ala Val Gly Tyr Ser Met Thr Glu Gly Leu Gly Gln Leu Thr
        195                 200                 205
Asp Gly Val Ser Gly Leu Asp Asp Phe Thr Gln Thr His Glu Tyr His
    210                 215                 220
Val Trp Pro Gly Tyr Asp Tyr Val Gly Trp Arg Asn Glu Ser Ala Thr
225                 230                 235                 240
Asn Gly Tyr Ile Glu Ile Met Phe Glu Phe Asp Arg Ile Arg Asn Phe
                245                 250                 255
Thr Thr Met Lys Val His Cys Asn Asn Met Phe Ala Lys Gly Val Lys
            260                 265                 270
Ile Phe Lys Glu Val Gln Cys Tyr Phe Arg Ser Glu Ala Ser Glu Trp
        275                 280                 285
Glu Pro Asn Ala Ile Ser Phe Pro Leu Val Leu Asp Asp Val Asn Pro
    290                 295                 300
Ser Ala Arg Phe Val Thr Val Pro Leu His His Arg Met Ala Ser Ala
305                 310                 315                 320
Ile Lys Cys Gln Tyr His Phe Ala Asp Thr Trp Met Met Phe Ser Glu
                325                 330                 335
Ile Thr Phe Gln Ser Asp Ala Ala Met Tyr Asn Asn Ser Glu Ala Leu
            340                 345                 350
Pro Thr Ser Pro Met Ala Pro Thr Thr Tyr Asp Pro Met Leu Lys Val
        355                 360                 365
Asp Asp Ser Asn Thr Arg Ile Leu Ile Gly Cys Leu Val Ala Ile Ile
    370                 375                 380
Phe Ile Leu Leu Ala Ile Ile Val Ile Ile Leu Trp Arg Gln Phe Trp
385                 390                 395                 400
Gln Lys Met Leu Glu Lys Ala Ser Arg Arg Met Leu Asp Asp Glu Met
                405                 410                 415
Thr Val Ser Leu Ser Leu Pro Ser Asp Ser Ser Met Phe Asn Asn Asn
            420                 425                 430
Arg Ser Ser Ser Pro Ser Glu Gln Gly Ser Asn Ser Thr Tyr Asp Arg
        435                 440                 445
Ile Phe Pro Leu Arg Pro Asp Tyr Gln Glu Pro Ser Arg Leu Ile Arg
    450                 455                 460
Lys Leu Pro Glu Phe Ala Pro Gly Glu Glu Glu Ser Gly Cys Ser Gly
465                 470                 475                 480
Val Val Lys Pro Val Gln Pro Ser Gly Pro Glu Gly Val Pro His Tyr
                485                 490                 495
Ala Glu Ala Asp Ile Val Asn Leu Gln Gly Val Thr Gly Gly Asn Thr
            500                 505                 510
Tyr Ser Val Pro Ala Val Thr Met Asp Leu Leu Ser Gly Lys Arg Cys
```

```
        515                 520                 525
Gly Cys Gly Arg Glu Phe Pro Pro Gly Lys Leu Leu Thr Phe Lys Glu
    530                 535                 540
Lys Leu Gly Glu Gly Gln Phe Gly Glu Val His Leu Cys Glu Val Glu
545                 550                 555                 560
Gly Met Glu Lys Phe Lys Asp Lys Asp Phe Ala Leu Asp Val Ser Ala
                565                 570                 575
Asn Gln Pro Val Leu Val Ala Val Lys Met Leu Arg Ala Asp Ala Asn
            580                 585                 590
Lys Asn Ala Arg Asn Asp Phe Leu Lys Glu Ile Lys Ile Met Ser Arg
        595                 600                 605
Leu Lys Asp Pro Asn Ile Ile His Leu Leu Ser Val Cys Ile Thr Asp
    610                 615                 620
Asp Pro Leu Cys Met Ile Thr Glu Tyr Met Glu Asn Gly Asp Leu Asn
625                 630                 635                 640
Gln Phe Leu Ser Arg His Glu Pro Pro Asn Ser Ser Ser Ser Asp Val
                645                 650                 655
Arg Thr Val Ser Tyr Thr Asn Leu Lys Phe Met Ala Thr Gln Ile Ala
            660                 665                 670
Ser Gly Met Lys Tyr Leu Ser Ser Leu Asn Phe Val His Arg Asp Leu
        675                 680                 685
Ala Thr Arg Asn Cys Leu Val Gly Lys Asn Tyr Thr Ile Lys Ile Ala
    690                 695                 700
Asp Phe Gly Met Ser Arg Asn Leu Tyr Ser Gly Asp Tyr Tyr Arg Ile
705                 710                 715                 720
Gln Gly Arg Ala Val Leu Pro Ile Arg Trp Met Ser Trp Glu Ser Ile
                725                 730                 735
Leu Leu Gly Lys Phe Thr Thr Ala Ser Asp Val Trp Ala Phe Gly Val
            740                 745                 750
Thr Leu Trp Glu Thr Phe Thr Phe Cys Gln Arg Lys Gly Pro Tyr Ser
        755                 760                 765
Gln Leu Ser Asp Glu Thr Gly Tyr Xaa Arg Asn Thr Gly Glu Phe Phe
    770                 775                 780
Pro Arg Pro Lys Gly Gly Gln Thr Tyr Leu Pro Ser Thr Ser Pro Phe
785                 790                 795                 800
Val Pro Asp Ser Cys Val Ile Lys Leu Met Leu Ser Cys Trp Arg Arg
                805                 810                 815
Asp Thr Lys Asn Arg Pro Ser Phe Gln Glu Ile His Leu Leu Leu Leu
            820                 825                 830
Gln Gln Gly Asp Glu Arg Cys Cys Gln Cys Leu Ala Met Phe Leu Arg
        835                 840                 845
Leu Arg Ser Ser Leu Gln Asp Leu Pro Leu Thr His Ala Tyr Ala Thr
    850                 855                 860
Pro Ser Gly His Leu Met Lys Leu Arg Asp Arg Gly Leu Phe Ala Leu
865                 870                 875                 880
Pro Ser Phe Pro Gly His Pro His Ser Leu Pro Leu Thr His Ile Tyr
                885                 890                 895
Phe Phe Phe Phe Thr Leu Lys Asn
            900                 904
```

<210> 1080
<211> 304
<212>Amino acid
<213> Homo sapiens

<400> 1080

```
Cys Ser Ala Ser Pro Leu Arg Pro Gly Leu Leu Ala Pro Asp Leu Leu
  1               5                  10                  15
Tyr Leu Pro Gly Ala Gly Gln Pro Arg Arg Pro Glu Ala Glu Pro Gly
```

```
            20                  25                  30
Gln Lys Pro Val Val Pro Thr Leu Tyr Val Thr Glu Ala Glu Ala His
        35                  40                  45
Ser Pro Ala Leu Pro Gly Leu Ser Gly Pro Gln Pro Lys Trp Val Glu
    50                  55                  60
Val Glu Glu Thr Ile Glu Val Arg Val Lys Lys Met Gly Pro Gln Gly
65                  70                  75                  80
Val Ser Pro Thr Thr Glu Val Pro Arg Ser Ser Ser Gly His Leu Phe
                85                  90                  95
Thr Leu Pro Gly Ala Thr Pro Gly Gly Asp Pro Asn Ser Asn Asn Ser
            100                 105                 110
Asn Asn Lys Leu Leu Ala Gln Glu Ala Trp Ala Gln Gly Thr Ala Met
        115                 120                 125
Val Gly Val Arg Glu Pro Leu Val Phe Arg Val Asp Ala Arg Gly Ser
    130                 135                 140
Val Asp Trp Ala Ala Ser Gly Met Gly Ser Leu Glu Glu Glu Gly Thr
145                 150                 155                 160
Met Glu Glu Ala Gly Glu Glu Glu Gly Glu Asp Gly Asp Ala Phe Val
                165                 170                 175
Thr Glu Glu Ser Gln Asp Thr His Ser Leu Gly Asp Arg Asp Pro Lys
            180                 185                 190
Ile Leu Thr His Asn Gly Arg Met Leu Thr Leu Ala Asp Leu Glu Asp
        195                 200                 205
Tyr Val Pro Gly Glu Gly Glu Thr Phe His Cys Gly Gly Pro Gly Pro
    210                 215                 220
Gly Ala Pro Asp Asp Pro Pro Cys Glu Val Ser Val Ile Gln Arg Glu
225                 230                 235                 240
Ile Gly Glu Pro Thr Val Gly Ser Leu Cys Cys Ser Ala Trp Gly Met
                245                 250                 255
His Trp Val Pro Glu Ala Leu Ser Ala Ser Leu Gly Leu Ser Pro Met
            260                 265                 270
Gly Arg His His Arg Asp Pro Arg Ser Val Ala Leu Arg Ala Pro Pro
        275                 280                 285
Ser Ser Cys Gly Arg Pro Arg Leu Gly Leu Trp Ala Val Leu Pro Gly
    290                 295                 300                 304
```

<210> 1081
<211> 139
<212>Amino acid
<213> Homo sapiens

<400> 1081

```
Gln Gly Leu Ala Ala Glu Phe Leu Gln Val Pro Ala Val Thr Arg Ala
  1                 5                  10                  15
Tyr Thr Ala Ala Cys Val Leu Thr Thr Ala Ala Val Gln Leu Glu Leu
            20                  25                  30
Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val Phe Arg Lys
        35                  40                  45
Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly Phe Ser Leu Leu
    50                  55                  60
Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile Ala Val Gly His
65                  70                  75                  80
Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln Pro Gly Gly Lys
                85                  90                  95
Arg Leu Leu Gln Thr Pro Gly Phe Leu Gly Leu Gln Ser Ser Lys Ala
            100                 105                 110
Pro Ala Gly Ser Ser Leu Thr Ile Trp Thr Gln Gln Ser Gln Gly Gly
```

```
        115                 120                 125
Pro Gly Thr Ala Gly Glu Leu Ala Ala Pro Ser
    130                 135             139


     <210> 1082
     <211> 1105
     <212>Amino acid
     <213> Homo sapiens

     <220>
     <221> misc_feature
     <222> (1)...(1105)
     <223> X = any amino acid or stop code



     <400> 1082
Glu Lys Asn Ala Leu Glu Pro Thr Val Tyr Phe Gly Met Gly Val Xaa
  1               5                  10                  15
Ala Pro Gln Val Pro Arg Phe Gln Gln Arg Ile Thr Gly Tyr Gln Tyr
            20                  25                  30
Tyr Leu Gln Leu Arg Lys Asp Ile Trp Glu Glu Gly Ile Pro Cys Thr
        35                  40                  45
Leu Glu Gln Pro Ile His Leu Ala Gly Leu Ala Val Gln Ala Ile Phe
    50                  55                  60
Gly Asp Phe Asp Gln Tyr Glu Ser Gln Asp Phe Leu Gln Lys Phe Ala
65                  70                  75                  80
Leu Phe Pro Val Gly Trp Leu Gln Asp Glu Lys Val Leu Glu Glu Ala
                85                  90                  95
Thr Gln Lys Val Ala Leu Leu His Gln Lys Tyr Arg Gly Leu Thr Ala
            100                 105                 110
Pro Asp Ala Glu Met Leu Tyr Met Gln Glu Val Glu Arg Met Asp Gly
        115                 120                 125
Tyr Gly Glu Glu Ser Tyr Pro Ala Lys Asp Ser Gln Gly Ser Asp Ile
    130                 135                 140
Ser Ile Gly Ala Cys Leu Glu Gly Ile Phe Val Lys His Lys Asn Gly
145                 150                 155                 160
Arg His Pro Val Val Phe Arg Trp His Asp Ile Ala Asn Met Ser His
                165                 170                 175
Asn Lys Ser Phe Phe Ala Leu Glu Leu Ala Asn Lys Glu Glu Thr Ile
            180                 185                 190
Gln Phe Gln Thr Glu Asp Met Glu Thr Ala Lys Tyr Ile Trp Arg Leu
        195                 200                 205
Cys Val Ala Arg His Lys Phe Tyr Arg Leu Asn Gln Cys Asn Leu Gln
    210                 215                 220
Thr Gln Thr Val Thr Val Asn Pro Ile Arg Arg Arg Ser Ser Ser Arg
225                 230                 235                 240
Met Ser Leu Pro Lys Pro Gln Pro Tyr Val Met Pro Pro Pro Pro Gln
                245                 250                 255
Leu His Tyr Asn Gly His Tyr Thr Glu Pro Tyr Ala Ser Ser Gln Asp
            260                 265                 270
Asn Leu Phe Val Pro Asn Gln Glu Gly Tyr Tyr Gly Gln Phe Gln Thr
        275                 280                 285
Ser Leu Asn Arg Ala Gln Ile Asp Phe Asn Gly Arg Ile Arg Asn Ala
    290                 295                 300
Ser Val Tyr Ser Ala His Ser Thr Asn Ser Leu Asn Asn Pro Gln Pro
305                 310                 315                 320
Tyr Leu Gln Pro Ser Pro Met Ser Ser Asn Pro Ser Ile Thr Gly Ser
                325                 330                 335
Asp Val Met Arg Pro Asp Tyr Leu Pro Ser His Arg His Ser Ala Val
            340                 345                 350
```

```
Ile Pro Pro Ser Tyr Arg Pro Thr Pro Asp Tyr Glu Thr Val Met Lys
        355                 360                 365
Gln Leu Asn Arg Gly Leu Val His Ala Glu Arg Gln Ser His Ser Leu
    370                 375                 380
Arg Asn Leu Asn Ile Gly Ser Ser Tyr Ala Tyr Ser Arg Pro Ala Ala
385                 390                 395                 400
Leu Val Tyr Ser Gln Pro Glu Ile Arg Glu His Ala Gln Leu Pro Ser
                405                 410                 415
Pro Ala Ala Ala His Cys Pro Phe Ser Leu Ser Tyr Ser Phe His Ser
            420                 425                 430
Pro Ser Pro Tyr Pro Tyr Pro Ala Glu Arg Arg Pro Val Val Gly Ala
        435                 440                 445
Val Ser Val Pro Glu Leu Thr Asn Ala Gln Leu Gln Ala Gln Asp Tyr
    450                 455                 460
Pro Ser Pro Asn Ile Met Arg Thr Gln Val Tyr Arg Pro Pro Pro Pro
465                 470                 475                 480
Tyr Pro Pro Pro Arg Pro Ala Asn Ser Thr Pro Asp Leu Ser Arg His
                485                 490                 495
Leu Tyr Ile Ser Ser Ser Asn Pro Asp Leu Ile Thr Arg Arg Val His
            500                 505                 510
His Ser Val Gln Thr Phe Gln Glu Asp Ser Leu Pro Val Ala His Ser
        515                 520                 525
Leu Gln Glu Val Ser Glu Pro Leu Thr Ala Ala Arg His Ala Gln Leu
    530                 535                 540
His Lys Arg Asn Ser Ile Glu Val Ala Gly Leu Ser His Gly Leu Glu
545                 550                 555                 560
Gly Leu Arg Leu Lys Glu Arg Thr Leu Ser Ala Ser Ala Ala Glu Val
                565                 570                 575
Ala Pro Arg Ala Val Ser Val Gly Ser Gln Pro Ser Val Phe Thr Glu
            580                 585                 590
Arg Thr Gln Arg Glu Gly Pro Glu Glu Ala Glu Gly Leu Arg Tyr Gly
        595                 600                 605
His Lys Lys Ser Leu Ser Asp Ala Thr Met Leu Ile His Ser Ser Glu
    610                 615                 620
Glu Glu Glu Asp Glu Asp Phe Glu Glu Glu Ser Gly Ala Arg Ala Pro
625                 630                 635                 640
Pro Ala Arg Ala Arg Glu Pro Arg Pro Gly Leu Ala Gln Asp Pro Pro
                645                 650                 655
Gly Cys Pro Arg Val Leu Leu Ala Gly Pro Leu His Ile Leu Glu Pro
            660                 665                 670
Lys Ala His Val Pro Asp Ala Glu Lys Arg Met Met Asp Ser Ser Pro
        675                 680                 685
Val Arg Thr Thr Ala Glu Ala Gln Arg Pro Trp Arg Asp Gly Leu Leu
    690                 695                 700
Met Pro Ser Met Ser Glu Ser Asp Leu Thr Thr Ser Gly Arg Tyr Arg
705                 710                 715                 720
Ala Arg Arg Asp Ser Leu Lys Lys Arg Pro Val Ser Asp Leu Leu Ser
                725                 730                 735
Gly Lys Lys Asn Ile Val Glu Gly Leu Pro Pro Leu Gly Gly Met Lys
            740                 745                 750
Lys Thr Arg Val Asp Ala Lys Lys Ile Gly Pro Leu Lys Leu Ala Ala
        755                 760                 765
Leu Asn Gly Leu Ser Leu Ser Arg Val Pro Leu Pro Asp Glu Gly Lys
    770                 775                 780
Glu Val Ala Thr Arg Ala Thr Asn Asp Glu Arg Cys Lys Ile Leu Glu
785                 790                 795                 800
Gln Arg Leu Glu Gln Gly Met Val Phe Thr Glu Tyr Glu Arg Ile Leu
                805                 810                 815
Lys Lys Arg Leu Val Asp Gly Glu Cys Ser Thr Ala Arg Leu Pro Glu
            820                 825                 830
Asn Ala Glu Arg Asn Arg Phe Gln Asp Val Leu Pro Tyr Asp Asp Val
        835                 840                 845
Arg Val Glu Leu Val Pro Thr Lys Glu Asn Asn Thr Gly Tyr Ile Asn
    850                 855                 860
```

```
Ala Ser His Ile Lys Val Ser Val Ser Gly Ile Glu Trp Asp Tyr Ile
865                 870                 875                 880
Ala Thr Gln Gly Pro Leu Gln Asn Thr Cys Gln Asp Phe Trp Gln Met
                885                 890                 895
Val Trp Glu Gln Gly Ile Ala Ile Ile Ala Met Val Thr Ala Glu Glu
            900                 905                 910
Glu Gly Gly Arg Glu Lys Ser Phe Arg Tyr Trp Pro Arg Leu Gly Ser
        915                 920                 925
Arg His Asn Thr Val Thr Tyr Gly Arg Phe Lys Ile Thr Thr Arg Phe
    930                 935                 940
Arg Thr Asp Ser Gly Cys Tyr Ala Thr Thr Gly Leu Lys Met Lys His
945                 950                 955                 960
Leu Leu Thr Gly Gln Glu Arg Thr Val Trp His Leu Gln Tyr Thr Asp
                965                 970                 975
Trp Pro Glu His Gly Cys Pro Glu Asp Leu Lys Gly Phe Leu Ser Tyr
            980                 985                 990
Leu Glu Glu Ile Gln Ser Val Arg Arg His Thr Asn Ser Thr Ser Asp
        995                1000                1005
Pro Gln Ser Pro Asn Pro Pro Leu Leu Val His Cys Ser Ala Gly Val
   1010                1015                1020
Gly Arg Thr Gly Val Val Ile Leu Ser Glu Ile Met Ile Ala Cys Leu
1025                1030                1035                1040
Glu His Asn Glu Val Leu Asp Ile Pro Arg Val Leu Asp Met Leu Arg
                1045                1050                1055
Gln Gln Arg Met Met Leu Val Gln Thr Leu Cys Gln Tyr Thr Phe Val
            1060                1065                1070
Tyr Arg Val Leu Ile Gln Val Pro Glu Lys Ala Pro Arg Leu Ile Leu
        1075                1080                1085
Ser Ser Pro Gln Phe Pro Tyr Gly Ala Gln Ser Cys Glu Ala Phe Thr
   1090                1095                1100
Ala
1105
```

<210> 1083
<211> 99
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(99)
<223> X = any amino acid or stop code

<400> 1083

```
Arg Lys Lys Gln Lys Leu Ala Glu Glu Xaa Val Glu Leu Ser Lys Leu
  1               5                  10                  15
Ala Asp Leu Lys Asp Ala Glu Ala Val Gln Lys Phe Phe Leu Glu Glu
            20                  25                  30
Ile Xaa Leu Gly Glu Glu Ile Leu Ala Lys Gly Val Asp His Leu Thr
        35                  40                  45
Asn Pro Ser Ala Val Cys Gly Gln Pro Gln Trp Leu Leu Gln Val Leu
    50                  55                  60
Gln Gln Thr Leu Pro Leu Pro Val Ile Gln Met Leu Leu Thr Lys Pro
65                  70                  75                  80
Leu Pro Val Asn Gln Arg Leu Val Ser Ala Gly Ser Leu Ala Lys Asp
                85                  90                  95
Asp Val Glu
            99
```

<210> 1084
<211> 206
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(206)
<223> X = any amino acid or stop code

<400> 1084

```
Ser Phe Cys Leu His Glu Phe Gly Trp Leu Gly Ser Ser Pro Gln Ser
  1               5                  10                  15
Asp His Pro Val Pro Ala Leu Leu Gly Leu Gly Ala Phe Val His His
             20                  25                  30
Ser Leu Leu Gln Val His Ser Ser Pro Gly Ala Gly Pro Val Ser Phe
         35                  40                  45
Leu Phe Leu Gly Glu Ser Cys Ser Pro Val Asp Glu Pro Arg Cys Val
     50                  55                  60
Pro Ser Cys Ala Phe Gly Phe Leu Ser Cys Phe Pro Leu Leu Asn Ser
 65                  70                  75                  80
Ala Ala Leu Glu Arg Gly Leu Phe Phe Phe Val Val Phe Phe Phe Leu
                 85                  90                  95
Glu Ser Gly Ser Cys Gln Val Ala Arg Ala Gly Val Arg Asp Arg Asp
            100                 105                 110
Arg Gly Ser Leu Gln Pro Pro Pro Pro Gly Leu Lys Gln Phe Cys Leu
        115                 120                 125
Ser Leu Pro Ser Arg Trp Asp His Arg His Pro Pro Pro Leu Arg Val
    130                 135                 140
Pro Xaa Phe Val Phe Val Phe Leu Val Glu Leu Gly Phe His His Val
145                 150                 155                 160
Ala Gln Ala Gly Leu Lys Leu Leu Thr Leu Ser Asp Pro Pro Ala Pro
                165                 170                 175
Ala Ser His Ser Ala Gly Ile Thr Gly Val Ser Gln Arg Asp Gln Pro
            180                 185                 190
Val Leu Phe Leu Arg Trp Ala Ser Cys Ser Glu Leu Val Gly
        195                 200                 205 206
```

<210> 1085
<211> 99
<212>Amino acid
<213> Homo sapiens

<400> 1085

```
Glu Gly Phe Pro Gly Arg Ser Leu Ser Gly Gly Leu Cys Cys Arg Leu
  1               5                  10                  15
Arg Arg Arg Phe Pro Ile Asp Gly Tyr Arg Pro Arg Arg Arg Arg Arg
             20                  25                  30
Trp Ser Cys Cys Pro Ser Gly Val Arg Pro Val Arg Arg Met Ser Gln
         35                  40                  45
Lys Ser Trp Ile Glu Ser Thr Leu Thr Lys Arg Glu Cys Val Tyr Ile
     50                  55                  60
Ile Pro Ser Ser Lys Asp Pro His Arg Cys Leu Pro Gly Cys Gln Ile
 65                  70                  75                  80
```

```
Cys Gln Gln Leu Val Arg Arg Gly Phe Thr Val Leu Ala Arg Met Val
                    85                  90                  95
Ser Ile Ser
         99
```

<210> 1086
<211> 53
<212>Amino acid
<213> Homo sapiens

<400> 1086

```
Gln Asn Ser Thr Cys Leu Thr Ala Gln Thr His Ser Leu Leu Gln His
  1               5                  10                  15
Gln Pro Leu Gln Leu Thr Thr Leu Leu Asp Gln Tyr Ile Arg Glu Gln
            20                  25                  30
Arg Glu Lys Asp Ser Val Met Ser Ala Asn Gly Lys Pro Asp Pro Asp
        35                  40                  45
Thr Val Pro Asp Ser
    50              53
```

<210> 1087
<211> 250
<212>Amino acid
<213> Homo sapiens

<400> 1087

```
Leu Asn Pro Trp Lys Asn Ala Leu Gln Asp Phe Cys Leu Pro Phe Leu
  1               5                  10                  15
Arg Ile Thr Ser Leu Leu Gln His His Leu Phe Gly Glu Asp Leu Pro
            20                  25                  30
Ser Cys Gln Glu Glu Glu Glu Phe Ser Val Leu Ala Ser Cys Leu Gly
        35                  40                  45
Leu Leu Pro Thr Phe Tyr Gln Thr Glu His Pro Phe Ile Ser Ala Ser
    50                  55                  60
Cys Leu Asp Trp Pro Val Pro Ala Phe Asp Ile Ile Thr His Trp Cys
65                  70                  75                  80
Phe Glu Ile Lys Ser Phe Thr Glu Arg His Ala Glu Gln Gly Lys Ala
                85                  90                  95
Leu Leu Ile Gln Glu Ser Lys Trp Lys Leu Pro His Leu Leu Gln Leu
            100                 105                 110
Pro Glu Asn Tyr Asn Thr Ile Phe Gln Tyr Tyr His Arg Lys Thr Cys
        115                 120                 125
Ser Val Cys Thr Lys Val Pro Lys Asp Pro Ala Val Cys Leu Val Cys
    130                 135                 140
Gly Thr Phe Val Cys Leu Lys Gly Leu Cys Cys Lys Gln Gln Ser Tyr
145                 150                 155                 160
Cys Glu Cys Val Leu His Ser Gln Asn Cys Gly Ala Gly Thr Gly Ile
                165                 170                 175
Phe Leu Leu Ile Asn Ala Ser Val Ile Ile Ile Ile Arg Gly His Arg
            180                 185                 190
Phe Cys Leu Trp Gly Ser Val Tyr Leu Asp Ala His Gly Glu Glu Asp
        195                 200                 205
Arg Asp Leu Arg Arg Gly Lys Pro Leu Tyr Ile Cys Lys Glu Arg Tyr
    210                 215                 220
```

```
Lys Val Leu Glu Gln Gln Trp Ile Ser His Thr Phe Asp His Ile Asn
225                 230                 235                 240
Lys Arg Trp Gly Pro His Tyr Asn Gly Leu
                245                 250
```

<210> 1088
<211> 455
<212>Amino acid
<213> Homo sapiens

<400> 1088

```
Lys Gly Gln Leu Val Asn Leu Leu Pro Pro Glu Asn Phe Pro Trp Cys
  1               5                  10                  15
Gly Gly Ser Gln Gly Pro Arg Met Leu Arg Thr Cys Tyr Val Leu Cys
             20                  25                  30
Ser Gln Ala Gly Pro Arg Ser Arg Gly Trp Gln Ser Leu Ser Phe Asp
         35                  40                  45
Gly Gly Ala Phe His Leu Lys Gly Thr Gly Glu Leu Thr Arg Ala Leu
     50                  55                  60
Leu Val Leu Arg Leu Cys Ala Trp Pro Pro Leu Val Thr His Gly Leu
 65                  70                  75                  80
Leu Leu Gln Ala Trp Ser Arg Arg Leu Leu Gly Ser Arg Leu Ser Gly
                 85                  90                  95
Ala Phe Leu Arg Ala Ser Val Tyr Gly Gln Phe Val Ala Gly Glu Thr
            100                 105                 110
Ala Glu Glu Val Lys Gly Cys Val Gln Gln Leu Arg Thr Leu Ser Leu
        115                 120                 125
Arg Pro Leu Leu Ala Val Pro Thr Glu Glu Glu Pro Asp Ser Ala Ala
    130                 135                 140
Lys Ser Gly Glu Ala Trp Tyr Glu Gly Asn Leu Gly Ala Met Leu Arg
145                 150                 155                 160
Cys Val Asp Leu Ser Arg Gly Leu Leu Glu Pro Pro Ser Leu Ala Glu
                165                 170                 175
Ala Ser Leu Met Gln Leu Lys Val Thr Ala Leu Thr Ser Thr Arg Leu
            180                 185                 190
Cys Lys Glu Leu Ala Ser Trp Val Arg Arg Pro Gly Ala Ser Leu Glu
        195                 200                 205
Leu Ser Pro Glu Arg Leu Ala Glu Ala Met Asp Ser Gly Gln Asn Leu
    210                 215                 220
Gln Val Ser Cys Leu Asn Ala Glu Gln Asn Gln His Leu Arg Ala Ser
225                 230                 235                 240
Leu Ser Arg Leu His Arg Val Ala Gln Tyr Ala Arg Ala Gln His Val
                245                 250                 255
Arg Leu Leu Val Asp Ala Glu Tyr Thr Ser Leu Asn Pro Ala Leu Ser
            260                 265                 270
Leu Leu Val Ala Ala Leu Ala Val Arg Trp Asn Ser Pro Gly Glu Gly
        275                 280                 285
Gly Pro Trp Val Trp Asn Thr Tyr Gln Ala Cys Leu Lys Asp Thr Phe
    290                 295                 300
Glu Arg Leu Gly Arg Asp Ala Glu Ala Ala His Arg Ala Gly Leu Ala
305                 310                 315                 320
Phe Gly Val Lys Leu Val Arg Gly Ala Tyr Leu Asp Lys Glu Arg Ala
                325                 330                 335
Val Ala Gln Leu His Gly Met Glu Asp Pro Pro Thr Gln Ala Asp Tyr
            340                 345                 350
Glu Ala Thr Ser Gln Ser Tyr Ser Arg Cys Leu Glu Leu Met Leu Thr
        355                 360                 365
His Val Ala Arg His Gly Pro Met Cys His Leu Met Val Ala Ser His
    370                 375                 380
```

```
Asn Glu Glu Ser Val Arg Gln Ala Thr Lys Gly Gln Ala Gly Tyr Val
385                 390                 395                 400
Val Tyr Lys Ser Ile Pro Tyr Gly Ser Leu Glu Glu Val Ile Pro Tyr
                405                 410                 415
Leu Ile Arg Arg Ala Gln Glu Asn Arg Ser Val Leu Gln Gly Ala Arg
            420                 425                 430
Arg Glu Gln Glu Leu Leu Ser Gln Lys Leu Trp Arg Arg Leu Leu Pro
        435                 440                 445
Gly Cys Arg Arg Ile Pro His
    450                 455
```

<210> 1089
<211> 243
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(243)
<223> X = any amino acid or stop code

<400> 1089

```
Val Val Glu Phe Gly Glu Met Ser Thr Ala Arg Ala Pro Glu Gly Leu
  1               5                  10                  15
Arg Trp Phe Gln Leu Tyr Val His Pro Asp Leu Gln Leu Asn Lys Gln
            20                  25                  30
Leu Ile Gln Arg Val Glu Ser Leu Gly Phe Lys Ala Leu Val Ile Thr
        35                  40                  45
Leu Asp Thr Pro Val Cys Gly Asn Arg Arg His Asp Ile Arg Asn Gln
    50                  55                  60
Leu Arg Arg Asn Leu Thr Leu Thr Asp Leu Gln Ser Pro Lys Lys Gly
65                  70                  75                  80
Asn Ala Ile Pro Tyr Phe Gln Met Thr Pro Ile Ser Thr Ser Leu Cys
                85                  90                  95
Trp Asn Asp Leu Ser Trp Phe Gln Ser Ile Thr Arg Leu Pro Ile Ile
            100                 105                 110
Leu Lys Gly Ile Leu Thr Lys Glu Asp Ala Glu Leu Ala Val Lys His
        115                 120                 125
Asn Val Gln Gly Ile Ile Val Ser Asn His Gly Gly Arg Gln Leu Asp
    130                 135                 140
Glu Val Leu Ala Ser Ile Asp Ala Leu Thr Glu Val Gly Ala Ala Glu
145                 150                 155                 160
Xaa Gly Asn Met Lys Tyr Tyr Leu Asp Ala Gly Val Arg Thr Gly Asn
                165                 170                 175
Asp Val Gln Lys Ala Leu Ala Leu Gly Ala Lys Cys Ile Phe Leu Gly
            180                 185                 190
Arg Pro Ile Leu Trp Gly Leu Ala Cys Lys Gly Glu His Gly Val Lys
        195                 200                 205
Glu Val Leu Asn Ile Leu Thr Asn Glu Phe His Thr Ser Met Ala Leu
    210                 215                 220
Thr Gly Cys Arg Ser Val Ala Glu Ile Asn Arg Asn Leu Val Gln Phe
225                 230                 235                 240
Ser Arg Leu
        243
```

<210> 1090
<211> 90
<212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(90)
<223> X = any amino acid or stop code

<400> 1090

```
Phe Phe Leu Arg Trp Ser Phe Thr Leu Leu Pro Arg Leu Glu Cys Gln
 1               5                  10                  15
Trp Leu Asn Leu Gly Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Xaa
            20                  25                  30
Ser Ser Cys Leu Arg Leu Leu Ser Ser Trp Gly Leu Gln Val Pro Thr
        35                  40                  45
Ser Met Leu Gly Xaa Phe Phe Cys Ile Phe Ser Arg Glu Gly Ile Ser
    50                  55                  60
Pro Cys Trp Pro Gly Trp Ser Gln Thr Pro Lys Val Ile His Leu Pro
65                  70                  75                  80
Arg Pro Pro Arg Val Leu Arg Leu Gln Ala
                85                  90
```

<210> 1091
<211> 259
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(259)
<223> X = any amino acid or stop code

<400> 1091

```
Leu Leu Cys Phe Val His Thr Ala Leu Gln Ser Phe Gln Gly Glu Leu
 1               5                  10                  15
Tyr Glu Pro His Val Val Ile Ala Ile Val Val Phe Leu Val Lys Leu
            20                  25                  30
Gly Ile Cys Lys Xaa Arg Ala Ser Trp Arg Lys Lys Val Thr Leu Val
        35                  40                  45
Val Lys Xaa Ser Leu Lys Ile Cys Phe Thr Lys Tyr Gly Ser Cys Tyr
    50                  55                  60
His Pro Gly Glu Lys Ser Ser Ser Trp Leu Phe Asn Xaa Arg Met Val
65                  70                  75                  80
Asn Asp Cys Leu Ala Thr Ser Cys Ser Asn Arg Ser Phe Val Ile Gln
                85                  90                  95
Gln Ile Pro Ser Ser Asn Leu Phe Met Val Val Val Asp Ser Ser Cys
            100                 105                 110
Leu Cys Glu Ser Val Ala Pro Ile Thr Met Ala Pro Ile Glu Ile Arg
        115                 120                 125
Tyr Ile Leu Leu Cys Ala Gly Pro Leu Thr Thr Thr Glu Thr Ser Lys
    130                 135                 140
Gly Tyr Gln Trp Xaa Gly Asn Leu Gly Glu Lys Tyr Xaa Arg Arg Lys
145                 150                 155                 160
Ile Thr Ser Phe Pro Leu Leu Glu Arg Glu Ser Ser Xaa Glu Ser Cys
                165                 170                 175
His Cys Gln Ile Leu Thr Ser Glu Met Gln Ser Arg Lys Lys Gln Ser
```

```
            180                 185                 190
Leu Glu Thr Cys Leu Asn Tyr Ser Gln His Asn Glu Ser Leu Lys Cys
        195                 200                 205
Glu Arg Leu Lys Ala Gln Lys Ile Arg Arg Arg Pro Glu Ser Cys His
    210                 215                 220
Gly Phe His Pro Glu Glu Asn Ala Arg Glu Cys Gly Gly Ala Pro Ser
225                 230                 235                 240
Leu Gln Ala Gln Thr Val Leu Leu Leu Leu Pro Leu Leu Leu Met Leu
                245                 250                 255
Phe Ser Arg
        259
```

<210> 1092
<211> 117
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(117)
<223> X = any amino acid or stop code

<400> 1092

```
Val Pro Ser Pro Thr His Asp Pro Lys Pro Ala Glu Ala Pro Met Pro
  1               5                  10                  15
Ala Xaa Pro Ala Pro Pro Gly Pro Ala Ser Pro Gly Gly Ala Leu Glu
            20                  25                  30
Pro Pro Ala Ala Ala Arg Ala Gly Gly Ser Pro Thr Ala Val Arg Ser
        35                  40                  45
Ile Leu Thr Lys Glu Arg Arg Pro Glu Gly Gly Tyr Lys Ala Val Trp
    50                  55                  60
Phe Gly Glu Asp Ile Gly Thr Glu Ala Asp Val Val Val Leu Asn Ala
65                  70                  75                  80
Pro Thr Leu Asp Val Asp Gly Ala Ser Asp Ser Gly Ser Gly Asp Glu
                85                  90                  95
Gly Glu Gly Ala Gly Arg Gly Gly Gly Pro Tyr Asp Ala Pro Gly Gly
            100                 105                 110
Asp Asp Ser Tyr Ile
        115     117
```

<210> 1093
<211> 763
<212>Amino acid
<213> Homo sapiens

<400> 1093

```
Leu Ile Ser Leu Ala Gly Pro Thr Asp Asp Ile Gln Ser Thr Gly Pro
  1               5                  10                  15
Gln Val His Ala Leu Asn Ile Leu Arg Ala Leu Phe Arg Asp Thr Arg
            20                  25                  30
Leu Gly Glu Asn Ile Ile Pro Tyr Val Ala Asp Gly Ala Lys Ala Ala
        35                  40                  45
Ile Leu Gly Phe Thr Ser Pro Val Trp Ala Val Arg Asn Ser Ser Thr
    50                  55                  60
```

```
Leu Leu Phe Ser Ala Leu Ile Thr Arg Ile Phe Gly Val Lys Arg Ala
 65                  70                  75                  80
Lys Asp Glu His Ser Lys Thr Asn Arg Met Thr Gly Arg Glu Phe Phe
                85                  90                  95
Ser Arg Phe Pro Glu Leu Tyr Pro Phe Leu Leu Lys Gln Leu Glu Thr
            100                 105                 110
Val Ala Asn Thr Val Asp Ser Asp Met Gly Glu Pro Asn Arg His Pro
        115                 120                 125
Ser Met Phe Leu Leu Leu Leu Val Leu Glu Arg Leu Tyr Ala Ser Pro
    130                 135                 140
Met Asp Gly Thr Ser Ser Ala Leu Ser Met Gly Pro Phe Val Pro Phe
145                 150                 155                 160
Ile Met Arg Cys Gly His Ser Pro Val Tyr His Ser Arg Glu Met Ala
                165                 170                 175
Ala Arg Ala Leu Val Pro Phe Val Met Ile Asp His Ile Pro Asn Thr
            180                 185                 190
Ile Arg Thr Leu Leu Ser Thr Leu Pro Ser Cys Thr Asp Gln Cys Phe
        195                 200                 205
Arg Gln Asn His Ile His Gly Thr Leu Leu Gln Val Phe His Leu Val
    210                 215                 220
Gln Ala Tyr Ser Asp Ser Lys His Gly Thr Asn Ser Asp Phe Gln His
225                 230                 235                 240
Glu Leu Thr Asp Ile Thr Val Cys Thr Lys Ala Lys Leu Trp Leu Ala
                245                 250                 255
Lys Arg Gln Asn Pro Cys Leu Val Thr Arg Ala Val Tyr Ile Asp Ile
            260                 265                 270
Leu Phe Leu Leu Thr Cys Cys Leu Asn Arg Ser Ala Lys Asp Asn Gln
        275                 280                 285
Pro Val Leu Glu Ser Leu Gly Phe Trp Glu Glu Val Arg Gly Ile Ile
    290                 295                 300
Ser Gly Ser Glu Leu Ile Thr Gly Phe Pro Trp Ala Phe Lys Val Pro
305                 310                 315                 320
Gly Leu Pro Gln Tyr Leu Gln Ser Leu Thr Arg Leu Ala Ile Ala Ala
                325                 330                 335
Val Trp Ala Ala Ala Ala Lys Ser Gly Glu Arg Glu Thr Asn Val Pro
            340                 345                 350
Ile Ser Phe Ser Gln Leu Leu Glu Ser Ala Phe Pro Glu Val Arg Ser
        355                 360                 365
Leu Thr Leu Glu Ala Leu Leu Glu Lys Phe Leu Ala Ala Ala Ser Gly
    370                 375                 380
Leu Gly Glu Lys Gly Val Pro Pro Leu Leu Cys Asn Met Gly Glu Lys
385                 390                 395                 400
Phe Leu Leu Leu Ala Met Lys Glu Asn His Pro Glu Cys Phe Cys Lys
                405                 410                 415
Ile Leu Lys Ile Leu His Cys Met Asp Pro Gly Glu Trp Leu Pro Gln
            420                 425                 430
Thr Glu His Cys Val His Leu Thr Pro Lys Glu Phe Leu Ile Trp Thr
        435                 440                 445
Met Asp Ile Ala Ser Asn Glu Arg Ser Glu Ile Gln Ser Val Ala Leu
    450                 455                 460
Arg Leu Ala Ser Lys Val Ile Ser His His Met Gln Thr Cys Val Glu
465                 470                 475                 480
Asn Arg Glu Leu Ile Ala Ala Glu Leu Lys Gln Trp Val Gln Leu Val
                485                 490                 495
Ile Leu Ser Cys Glu Asp His Leu Pro Thr Glu Ser Arg Leu Ala Val
            500                 505                 510
Val Glu Val Leu Thr Ser Thr Thr Pro Leu Phe Leu Thr Asn Pro His
        515                 520                 525
Pro Ile Leu Glu Leu Gln Asp Thr Leu Ala Leu Trp Lys Cys Val Leu
    530                 535                 540
Thr Leu Leu Gln Ser Glu Glu Gln Ala Val Arg Asp Ala Ala Thr Glu
545                 550                 555                 560
Thr Val Thr Thr Ala Met Ser Gln Glu Asn Thr Cys Gln Ser Thr Glu
                565                 570                 575
```

```
Phe Ala Phe Cys Gln Val Asp Ala Ser Ile Ala Leu Ala Leu Ala Leu
            580                 585                 590
Ala Val Leu Cys Asp Leu Leu Gln Gln Trp Asp Gln Leu Ala Pro Gly
        595                 600                 605
Leu Pro Ile Leu Leu Gly Trp Leu Leu Gly Glu Ser Asp Asp Leu Val
    610                 615                 620
Ala Cys Val Glu Ser Met His Gln Val Glu Glu Asp Tyr Leu Phe Glu
625                 630                 635                 640
Lys Ala Glu Val Asn Phe Trp Ala Glu Thr Leu Ile Phe Val Lys Tyr
                645                 650                 655
Leu Cys Lys His Leu Phe Cys Leu Leu Ser Lys Ser Gly Trp Arg Pro
            660                 665                 670
Pro Ser Pro Glu Met Leu Cys His Leu Gln Arg Met Val Ser Glu Gln
        675                 680                 685
Cys His Leu Leu Ser Gln Phe Phe Arg Glu Leu Pro Pro Ala Ala Glu
    690                 695                 700
Phe Val Lys Thr Val Glu Phe Thr Arg Leu Arg Ile Gln Glu Glu Arg
705                 710                 715                 720
Thr Leu Ala Cys Leu Arg Leu Leu Ala Phe Leu Glu Gly Lys Glu Gly
                725                 730                 735
Glu Asp Thr Leu Val Leu Ser Val Trp Asp Ser Tyr Ala Glu Ser Arg
            740                 745                 750
Gln Leu Thr Leu Pro Arg Thr Glu Ala Ala Cys
        755                 760         763
```

<210> 1094
<211> 413
<212>Amino acid
<213> Homo sapiens

<400> 1094

```
His Ala Phe Arg Pro Ile Ala Leu Gln Arg Gly Val Ser Phe Arg Gly
 1               5                  10                  15
Cys Ser Asn Gln Tyr Ala Glu Ser Arg Arg Leu Gln Gly Glu Ser Gly
            20                  25                  30
Ser Arg Ala Phe Ala His Leu Met Glu Ser Leu Leu Gln His Leu Asp
        35                  40                  45
Arg Phe Ser Glu Leu Leu Ala Val Ser Ser Thr Thr Tyr Val Ser Thr
    50                  55                  60
Trp Asp Pro Ala Thr Val Arg Arg Ala Leu Gln Trp Ala Arg Tyr Leu
65                  70                  75                  80
Arg His Ile His Arg Arg Phe Gly Arg His Gly Pro Ile Arg Thr Ala
                85                  90                  95
Leu Glu Arg Arg Leu His Asn Gln Trp Arg Gln Glu Gly Gly Phe Gly
            100                 105                 110
Arg Gly Pro Val Pro Gly Leu Ala Asn Phe Gln Ala Leu Gly His Cys
        115                 120                 125
Asp Val Leu Leu Ser Leu Arg Leu Leu Glu Asn Arg Ala Leu Gly Asp
    130                 135                 140
Ala Ala Arg Tyr His Leu Val Gln Gln Leu Phe Pro Gly Pro Gly Val
145                 150                 155                 160
Arg Asp Ala Asp Glu Glu Thr Leu Gln Glu Ser Leu Ala Arg Leu Ala
                165                 170                 175
Arg Arg Arg Ser Ala Val His Met Leu Arg Phe Asn Gly Tyr Arg Glu
            180                 185                 190
Asn Pro Asn Leu Gln Glu Asp Ser Leu Met Lys Thr Gln Ala Glu Leu
        195                 200                 205
Leu Leu Glu Arg Leu Gln Glu Val Gly Lys Ala Glu Ala Glu Arg Pro
    210                 215                 220
```

```
Ala Arg Phe Leu Ser Ser Leu Trp Glu Arg Leu Pro Gln Asn Asn Phe
225                 230                 235                 240
Leu Lys Val Ile Ala Val Ala Leu Leu Gln Pro Pro Leu Ser Arg Arg
                245                 250                 255
Pro Gln Glu Glu Leu Glu Pro Gly Ile His Lys Ser Pro Gly Glu Gly
            260                 265                 270
Ser Gln Val Leu Val His Trp Leu Leu Gly Asn Ser Glu Val Phe Ala
        275                 280                 285
Ala Phe Cys Arg Ala Leu Pro Ala Gly Leu Leu Thr Leu Val Thr Ser
    290                 295                 300
Arg His Pro Ala Leu Ser Pro Val Tyr Leu Gly Leu Leu Thr Asp Trp
305                 310                 315                 320
Gly Gln Arg Leu His Tyr Asp Leu Gln Lys Gly Ile Trp Val Gly Thr
                325                 330                 335
Glu Ser Gln Asp Val Pro Trp Glu Glu Leu His Asn Arg Phe Gln Ser
            340                 345                 350
Leu Cys Gln Ala Pro Pro Pro Leu Lys Asp Lys Val Leu Thr Ala Leu
        355                 360                 365
Glu Thr Cys Lys Ala Gln Asp Gly Asp Phe Glu Glu Pro Gly Leu Ser
    370                 375                 380
Ile Trp Thr Asp Leu Leu Leu Ala Leu Arg Ser Gly Ala Phe Arg Lys
385                 390                 395                 400
Arg Gln Val Leu Gly Leu Ser Ala Gly Leu Ser Ser Val
                405                 410         413
```

<210> 1095
<211> 344
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(344)
<223> X = any amino acid or stop code

<400> 1095

```
Ser His Leu Ile Gln His Gln Arg Ile His Thr Xaa Glu Xaa Ala His
  1               5                  10                  15
Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser Gln Thr Ser Cys Leu Ile
            20                  25                  30
Gln His His Lys Met His Arg Lys Glu Lys Ser Tyr Glu Cys Asn Glu
        35                  40                  45
Tyr Glu Gly Ser Phe Ser His Ser Ser Asp Leu Ile Leu Gln Gln Glu
    50                  55                  60
Val Leu Thr Arg Gln Lys Ala Phe Asp Cys Asp Val Trp Glu Lys Asn
65                  70                  75                  80
Ser Ser Gln Arg Ala His Leu Val Gln His Gln Ser Ile His Thr Lys
                85                  90                  95
Glu Lys Pro His Glu Cys Asn Glu Asp Gly Lys Ile Phe Asn Gln Ile
            100                 105                 110
Gln Ala Leu Ile Gln His Leu Arg Val His Thr Arg Glu Lys Tyr Val
        115                 120                 125
Cys Thr Ala Cys Gly Lys Ala Phe Ser His Ser Ser Ala Ile Ala Gln
    130                 135                 140
His Gln Ile Ile His Thr Arg Glu Lys Pro Ser Glu Cys Asp Glu Xaa
145                 150                 155                 160
Arg Lys Gly Ile Ser Val Lys Leu Leu Ile Asp Ser Cys Arg Ile Tyr
                165                 170                 175
Thr Ser Glu Lys Ser Tyr Lys Cys Ile Glu Cys Gly Lys Phe Phe Met
```

```
            180                 185                 190
Leu Leu Val Phe Ser Tyr Leu Ser His Ile Trp Arg Ile His Met Gly
        195                 200                 205
Ile Lys Phe His Cys Cys Asn Glu Cys Glu Lys Ala Ile Ser Gln Arg
    210                 215                 220
Asn Tyr Leu Val Xaa Tyr Gln Ile His Ala Met Gln Lys Asp Tyr Lys
225                 230                 235                 240
Cys Asn Glu Ala Cys Met Cys Val Arg Arg Phe Ser His Asn Pro Thr
                245                 250                 255
Leu Ile Gln His Gln Arg Ile Tyr Thr Xaa Glu Asn Leu Phe Gly Cys
            260                 265                 270
Ser Lys Cys Gly Arg Ser Phe Asn Arg Ser Leu Thr Ser Leu Cys His
        275                 280                 285
Ile Arg Ile Ser Ile Arg Arg Gln Glu Phe Asp Val Thr Gln Met Glu
    290                 295                 300
Lys Leu Asp Thr Thr Phe Gln Ala Ser Thr Gln His Arg Asn Asn Gly
305                 310                 315                 320
Glu Lys Ile Val Asp Tyr Leu Phe Met Lys Leu Leu Ile His Ser Pro
                325                 330                 335
Asn Leu Phe His Cys Thr Lys Ile
            340             344
```

<210> 1096
<211> 76
<212>Amino acid
<213> Homo sapiens

<400> 1096

```
Ala Val Thr Leu Thr Ala Lys Ile Cys Ser Phe Thr Pro Glu Pro Ser
  1               5                  10                  15
Glu Thr Met Ser Pro Pro Ala Gly Thr Asn Asn Ser Arg His Ala Ala
            20                  25                  30
Leu Arg Ala Val Thr Leu Pro Val Lys Val Cys Ser Phe Thr Pro Glu
        35                  40                  45
Pro Ala Arg Ser Arg Thr His Gln Lys Glu Glu Thr Pro Asn Thr Ser
    50                  55                  60
Glu His Gln Lys Glu Gln Thr Pro Glu Ala Pro Pro
65                  70                  75  76
```

<210> 1097
<211> 1462
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1462)
<223> X = any amino acid or stop code

<400> 1097

```
Met Ala Tyr Ser Trp Gln Thr Asp Pro Asn Pro Asn Glu Ser His Glu
  1               5                  10                  15
Lys Gln Tyr Glu His Gln Glu Phe Leu Phe Val Asn Gln Pro His Ser
            20                  25                  30
```

```
Ser Ser Gln Val Ser Leu Gly Phe Asp Gln Ile Val Asp Glu Ile Ser
         35                  40                  45
Gly Lys Ile Pro His Tyr Glu Ser Glu Ile Asp Glu Asn Thr Phe Phe
     50                  55                  60
Val Pro Thr Ala Pro Lys Trp Asp Ser Thr Gly His Ser Leu Asn Glu
 65                  70                  75                  80
Ala His Gln Ile Ser Leu Asn Glu Phe Thr Ser Lys Ser Arg Glu Leu
                 85                  90                  95
Ser Trp His Gln Val Ser Lys Ala Pro Ala Ile Gly Phe Ser Pro Ser
            100                 105                 110
Val Leu Pro Lys Pro Gln Asn Thr Asn Lys Glu Cys Ser Trp Gly Ser
        115                 120                 125
Pro Ile Gly Lys His His Gly Ala Asp Asp Ser Arg Phe Ser Ile Leu
    130                 135                 140
Ala Pro Ser Phe Thr Ser Leu Asp Lys Ile Asn Leu Glu Lys Glu Leu
145                 150                 155                 160
Glu Asn Glu Asn His Asn Tyr His Ile Gly Phe Glu Ser Ser Ile Pro
                165                 170                 175
Pro Thr Asn Ser Ser Phe Ser Ser Asp Phe Met Pro Lys Glu Glu Asn
            180                 185                 190
Lys Arg Ser Gly His Val Asn Ile Val Glu Pro Ser Leu Met Leu Leu
        195                 200                 205
Lys Gly Ser Leu Gln Pro Gly Met Trp Glu Ser Thr Trp Gln Lys Asn
    210                 215                 220
Ile Glu Ser Ile Gly Cys Ser Ile Gln Leu Val Glu Val Pro Gln Ser
225                 230                 235                 240
Ser Asn Thr Ser Leu Ala Ser Phe Cys Asn Lys Val Lys Lys Ile Arg
                245                 250                 255
Glu Arg Tyr His Ala Ala Asp Val Asn Phe Asn Ser Gly Lys Ile Trp
            260                 265                 270
Ser Thr Thr Thr Ala Phe Pro Tyr Gln Leu Phe Ser Lys Thr Lys Phe
        275                 280                 285
Asn Ile His Ile Phe Ile Asp Asn Ser Thr Gln Pro Leu His Phe Met
    290                 295                 300
Pro Cys Ala Asn Tyr Leu Val Lys Asp Leu Ile Ala Glu Ile Leu His
305                 310                 315                 320
Phe Cys Thr Asn Asp Gln Leu Leu Pro Lys Asp His Ile Leu Ser Val
                325                 330                 335
Trp Gly Ser Glu Glu Phe Leu Gln Asn Asp His Cys Leu Gly Ser His
            340                 345                 350
Lys Met Phe Gln Lys Asp Lys Ser Val Ile Gln Leu His Leu Gln Lys
        355                 360                 365
Ser Arg Glu Ala Pro Gly Lys Leu Ser Arg Lys His Glu Glu Asp His
    370                 375                 380
Ser Gln Phe Tyr Leu Asn Gln Leu Leu Glu Phe Met His Ile Trp Lys
385                 390                 395                 400
Val Ser Arg Gln Cys Leu Leu Thr Leu Ile Arg Lys Tyr Asp Phe His
                405                 410                 415
Leu Lys Tyr Leu Leu Lys Thr Gln Glu Asn Val Tyr Asn Ile Ile Glu
            420                 425                 430
Glu Val Lys Lys Ile Cys Ser Val Leu Gly Cys Val Glu Thr Lys Gln
        435                 440                 445
Ile Thr Asp Ala Val Asn Glu Leu Ser Leu Ile Leu Gln Arg Lys Gly
    450                 455                 460
Glu Asn Phe Tyr Gln Ser Ser Glu Thr Ser Ala Lys Gly Leu Ile Glu
465                 470                 475                 480
Lys Val Thr Thr Glu Leu Ser Thr Ser Ile Tyr Gln Leu Ile Asn Val
                485                 490                 495
Tyr Cys Asn Ser Phe Tyr Ala Asp Phe Gln Pro Val Asn Val Pro Arg
            500                 505                 510
Cys Thr Ser Tyr Leu Asn Pro Gly Leu Pro Ser His Leu Ser Phe Thr
        515                 520                 525
Val Tyr Ala Ala His Asn Ile Pro Glu Thr Trp Val His Arg Ile Asn
    530                 535                 540
```

```
Phe Pro Leu Glu Ile Lys Ser Leu Pro Arg Glu Ser Met Leu Thr Val
545                 550                 555                 560
Lys Leu Phe Gly Ile Ala Cys Ala Thr Asn Asn Ala Asn Leu Leu Ala
                565                 570                 575
Trp Thr Cys Leu Pro Leu Phe Pro Lys Glu Lys Ser Ile Leu Gly Ser
            580                 585                 590
Met Leu Phe Ser Met Thr Leu Gln Ser Glu Pro Pro Val Glu Met Ile
        595                 600                 605
Thr Pro Gly Val Trp Asp Val Ser Gln Pro Ser Pro Val Thr Leu Gln
    610                 615                 620
Ile Asp Phe Pro Ala Thr Gly Trp Glu Tyr Met Lys Pro Asp Ser Glu
625                 630                 635                 640
Glu Asn Arg Ser Asn Leu Glu Glu Pro Leu Lys Glu Cys Ile Lys His
                645                 650                 655
Ile Ala Arg Leu Ser Gln Lys Gln Thr Pro Leu Leu Leu Ser Glu Glu
            660                 665                 670
Lys Lys Arg Tyr Leu Trp Phe Tyr Arg Phe Tyr Cys Asn Asn Glu Asn
        675                 680                 685
Cys Ser Leu Pro Leu Val Leu Gly Ser Ala Pro Gly Trp Asp Glu Arg
    690                 695                 700
Thr Val Ser Glu Met His Thr Ile Leu Arg Arg Trp Thr Phe Ser Gln
705                 710                 715                 720
Pro Leu Glu Ala Leu Gly Leu Leu Thr Ser Ser Phe Pro Asp Gln Glu
                725                 730                 735
Ile Arg Lys Val Ala Val Gln Gln Leu Asp Asn Leu Leu Asn Asp Glu
            740                 745                 750
Leu Leu Glu Tyr Leu Pro Gln Leu Val Gln Ala Val Lys Phe Glu Trp
        755                 760                 765
Asn Leu Glu Ser Pro Leu Val Gln Leu Leu Leu His Arg Ser Leu Gln
    770                 775                 780
Ser Ile Gln Val Ala His Arg Leu Tyr Trp Leu Leu Lys Asn Ala Glu
785                 790                 795                 800
Asn Glu Ala Tyr Phe Lys Ser Trp Tyr Gln Lys Leu Leu Ala Ala Leu
                805                 810                 815
Gln Phe Cys Ala Gly Lys Ala Leu Asn Asp Glu Phe Ser Lys Glu Gln
            820                 825                 830
Lys Leu Ile Lys Ile Leu Gly Asp Ile Gly Glu Arg Val Lys Ser Ala
        835                 840                 845
Ser Asp His Gln Arg Gln Glu Val Leu Lys Lys Glu Ile Gly Arg Leu
    850                 855                 860
Glu Glu Phe Phe Gln Asp Val Asn Thr Cys His Leu Pro Leu Asn Pro
865                 870                 875                 880
Ala Leu Cys Ile Lys Gly Ile Asp His Asp Ala Cys Ser Tyr Phe Thr
                885                 890                 895
Ser Asn Ala Leu Pro Leu Lys Ile Thr Phe Ile Asn Ala Asn Leu Met
            900                 905                 910
Gly Lys Asn Ile Ser Ile Ile Phe Lys Ala Gly Asp Asp Leu Arg Gln
        915                 920                 925
Asp Met Leu Val Leu Gln Leu Ile Gln Val Met Asp Asn Ile Trp Leu
    930                 935                 940
Gln Glu Gly Leu Asp Met Gln Met Ile Ile Tyr Arg Cys Leu Ser Thr
945                 950                 955                 960
Gly Lys Asp Gln Arg Leu Val Gln Met Val Pro Asp Ala Val Thr Leu
                965                 970                 975
Ala Lys Ile His Arg His Ser Gly Leu Ile Gly Pro Leu Lys Glu Asn
            980                 985                 990
Thr Ile Lys Lys Trp Phe Ser Gln His Asn His Leu Lys Ala Asp Tyr
        995                1000                1005
Glu Lys Ala Leu Arg Asn Phe Phe Tyr Ser Cys Ala Gly Trp Cys Val
   1010                1015                1020
Val Thr Phe Ile Leu Gly Val Cys Asp Arg His Asn Asp Asn Ile Met
1025                1030                1035                1040
Leu Thr Lys Ser Gly His Met Phe His Ile Asp Phe Gly Lys Phe Leu
                1045                1050                1055
```

```
Gly His Ala Gln Thr Phe Gly Gly Ile Lys Arg Asp Arg Ala Pro Phe
           1060                1065                1070
Ile Phe Thr Ser Glu Met Glu Tyr Phe Ile Thr Glu Gly Gly Lys Asn
       1075                1080                1085
Pro Gln His Phe Gln Asp Phe Val Glu Leu Cys Cys Arg Ala Tyr Asn
   1090                1095                1100
Ile Ile Arg Lys His Ser Gln Leu Leu Leu Asn Leu Leu Glu Met Met
1105                1110                1115                1120
Leu Tyr Ala Gly Leu Pro Glu Leu Ser Gly Ile Gln Asp Leu Lys Tyr
                1125                1130                1135
Val Tyr Asn Asn Leu Arg Pro Gln Asp Thr Asp Leu Glu Ala Thr Ser
           1140                1145                1150
His Phe Thr Lys Lys Ile Lys Glu Ser Leu Glu Cys Phe Pro Val Lys
       1155                1160                1165
Leu Asn Asn Leu Ile His Thr Leu Ala Gln Met Ser Ala Ile Ser Pro
   1170                1175                1180
Ala Lys Ser Thr Ser Gln Thr Phe Pro Gln Glu Ser Cys Leu Leu Ser
1185                1190                1195                1200
Thr Thr Arg Ser Ile Glu Arg Ala Thr Ile Leu Gly Phe Ser Lys Lys
                1205                1210                1215
Ser Ser Asn Leu Tyr Leu Ile Gln Val Thr His Ser Asn Asn Glu Thr
           1220                1225                1230
Ser Leu Thr Glu Lys Ser Phe Glu Gln Phe Ser Lys Leu His Ser Gln
       1235                1240                1245
Leu Gln Lys Gln Phe Ala Ser Leu Thr Leu Pro Glu Phe Pro His Trp
   1250                1255                1260
Trp His Leu Pro Phe Thr Asn Ser Asp His Arg Arg Phe Arg Asp Leu
1265                1270                1275                1280
Asn His Tyr Met Glu Gln Ile Leu Asn Val Ser His Glu Val Thr Asn
                1285                1290                1295
Ser Asp Cys Val Leu Ser Phe Phe Leu Ser Glu Ala Gly Gln Gln Thr
           1300                1305                1310
Val Glu Glu Ser Ser Pro Val Tyr Leu Gly Glu Lys Phe Pro Asp Lys
       1315                1320                1325
Lys Pro Lys Val Gln Leu Val Ile Ser Tyr Glu Asp Val Lys Leu Thr
   1330                1335                1340
Ile Leu Val Lys His Met Lys Asn Ile His Leu Pro Asp Gly Ser Ala
1345                1350                1355                1360
Pro Ser Ala His Val Glu Phe Tyr Leu Leu Pro Tyr Pro Ser Glu Val
                1365                1370                1375
Arg Arg Arg Lys Thr Lys Ser Val Pro Lys Cys Thr Asp Pro Thr Tyr
           1380                1385                1390
Asn Glu Ile Val Val Tyr Asp Glu Val Thr Glu Leu Gln Gly His Val
       1395                1400                1405
Leu Met Leu Ile Val Lys Ser Lys Thr Val Phe Val Gly Ala Ile Asn
   1410                1415                1420
Ile Arg Leu Cys Ser Val Pro Leu Asp Lys Glu Lys Trp Tyr Pro Leu
1425                1430                1435                1440
Gly Asn Ser Ile Ile Xaa Pro Leu Leu Leu Phe Tyr Thr Ser Asn Phe
                1445                1450                1455
Met Gln Ser Val Leu His
           1460    1462
```

<210> 1098
<211> 111
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(111)
<223> X = any amino acid or stop code

<400> 1098
Phe Phe Leu Arg Trp Ser Leu Asp Ser Val Thr Gln Ala Gly Val Gln
1 5 10 15
Ser His Asp Leu Ser Ser Leu Gln Pro Pro Pro Pro Gly Phe Lys Gln
20 25 30
Ser Ser Leu Phe Gly Leu Pro Ser Ser Trp Glu Xaa Arg Trp Val Pro
35 40 45
Pro Cys Pro Ala Asn Phe Phe Val Phe Leu Val Glu Thr Gly Phe Arg
50 55 60
His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Asn Asp Leu Pro
65 70 75 80
Val Ser Ala Cys Gln Ser Ala Gly Ile Thr Gly Val Thr Thr Val Pro
85 90 95
Gln Arg Lys Ser Met Ile Leu Tyr Glu Val Thr Ile Cys Tyr Pro
100 105 110 111

<210> 1099
<211> 1070
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1070)
<223> X = any amino acid or stop code

<400> 1099
Phe Val Arg Glu Ile Arg Gly Pro Ala Val Pro Arg Leu Thr Ser Ala
1 5 10 15
Glu Asp Arg His Arg His Gly Pro His Ala His Ser Pro Glu Leu Gln
20 25 30
Arg Thr Gly Arg Asp Tyr Ser Leu Asp Tyr Leu Pro Phe Arg Leu Trp
35 40 45
Val Gly Ile Trp Val Ala Thr Phe Cys Leu Val Leu Val Ala Thr Glu
50 55 60
Ala Ser Val Leu Val Arg Tyr Phe Thr Arg Phe Thr Glu Glu Gly Phe
65 70 75 80
Cys Ala Leu Ile Ser Leu Ile Phe Ile Tyr Asp Ala Val Gly Lys Met
85 90 95
Leu Asn Leu Thr His Thr Tyr Pro Ile Gln Lys Pro Gly Ser Ser Ala
100 105 110
Tyr Gly Cys Leu Cys Gln Tyr Pro Gly Pro Gly Gly Asn Glu Ser Gln
115 120 125
Trp Ile Arg Thr Arg Pro Lys Asp Arg Asp Asp Ile Val Ser Met Asp
130 135 140
Leu Gly Leu Ile Asn Ala Ser Leu Leu Pro Pro Pro Glu Cys Thr Arg
145 150 155 160
Gln Gly Gly His Pro Arg Gly Pro Gly Cys His Thr Val Pro Asp Ile
165 170 175
Ala Phe Phe Ser Leu Leu Leu Phe Leu Thr Ser Phe Phe Phe Ala Met
180 185 190
Ala Leu Lys Cys Val Lys Thr Ser Arg Phe Phe Pro Ser Val Val Arg
195 200 205
Lys Gly Leu Ser Asp Phe Ser Ser Val Leu Ala Ile Leu Leu Gly Cys
210 215 220

```
Gly Leu Asp Ala Phe Leu Gly Leu Ala Thr Pro Lys Leu Met Val Pro
225                 230                 235                 240
Arg Glu Phe Lys Pro Thr Leu Pro Gly Arg Gly Trp Leu Val Ser Pro
                245                 250                 255
Phe Gly Ala Asn Pro Trp Trp Trp Ser Val Ala Ala Ala Leu Pro Ala
            260                 265                 270
Leu Leu Leu Ser Ile Leu Ile Phe Met Asp Gln Gln Ile Thr Ala Val
        275                 280                 285
Ile Leu Asn Arg Met Glu Tyr Arg Leu Gln Lys Gly Ala Gly Phe His
    290                 295                 300
Leu Asp Leu Phe Trp Val Ala Val Leu Met Leu Leu Thr Ser Ala Leu
305                 310                 315                 320
Gly Leu Pro Trp Tyr Val Ser Ala Thr Val Ile Ser Leu Ala His Met
                325                 330                 335
Asp Ser Leu Arg Arg Glu Ser Arg Ala Cys Ala Pro Gly Glu Arg Pro
            340                 345                 350
Asn Phe Leu Gly Ile Arg Glu Gln Arg Leu Thr Gly Leu Val Val Phe
        355                 360                 365
Ile Leu Thr Gly Ala Ser Ile Phe Leu Ala Pro Val Leu Lys Phe Ile
    370                 375                 380
Pro Met Pro Val Leu Tyr Gly Ile Phe Leu Tyr Met Gly Val Ala Ala
385                 390                 395                 400
Leu Ser Ser Ile Gln Phe Thr Asn Arg Val Lys Leu Leu Leu Met Pro
                405                 410                 415
Ala Lys His Gln Pro Asp Leu Leu Leu Leu Arg His Val Pro Leu Thr
            420                 425                 430
Arg Val His Leu Phe Thr Ala Ile Ser Phe Ala Cys Leu Gly Leu Leu
        435                 440                 445
Trp Ile Ile Lys Ser Thr Pro Ala Ala Ile Ile Phe Pro Leu Met Leu
    450                 455                 460
Leu Gly Leu Val Gly Val Arg Lys Ala Leu Glu Arg Val Phe Ser Pro
465                 470                 475                 480
Gln Glu Leu Leu Trp Leu Asp Glu Leu Met Pro Glu Glu Glu Arg Ser
                485                 490                 495
Ile Pro Glu Lys Gly Leu Glu Pro Glu His Ser Phe Ser Gly Ser Asp
            500                 505                 510
Ser Glu Asp Ser Glu Leu Met Tyr Gln Pro Lys Ala Pro Glu Ile Asn
        515                 520                 525
Ile Ser Val Asn Xaa Leu Glu Xaa Glu Phe Val Arg Glu Ile Arg Gly
    530                 535                 540
Pro Ala Val Pro Arg Leu Thr Ser Ala Glu Asp Arg His Arg His Gly
545                 550                 555                 560
Pro His Ala His Ser Pro Glu Leu Gln Arg Thr Gly Arg Asp Tyr Ser
                565                 570                 575
Leu Asp Tyr Leu Pro Phe Arg Leu Trp Val Gly Ile Trp Val Ala Thr
            580                 585                 590
Phe Cys Leu Val Leu Val Ala Thr Glu Ala Ser Val Leu Val Arg Tyr
        595                 600                 605
Phe Thr Arg Phe Thr Glu Glu Gly Phe Cys Ala Leu Ile Ser Leu Ile
    610                 615                 620
Phe Ile Tyr Asp Ala Val Gly Lys Met Leu Asn Leu Thr His Thr Tyr
625                 630                 635                 640
Pro Ile Gln Lys Pro Gly Ser Ser Ala Tyr Gly Cys Leu Cys Gln Tyr
                645                 650                 655
Pro Gly Pro Gly Gly Asn Glu Ser Gln Trp Ile Arg Thr Arg Pro Lys
            660                 665                 670
Asp Arg Asp Asp Ile Val Ser Met Asp Leu Gly Leu Ile Asn Ala Ser
        675                 680                 685
Leu Leu Pro Pro Pro Glu Cys Thr Arg Gln Gly Gly His Pro Arg Gly
    690                 695                 700
Pro Gly Cys His Thr Val Pro Asp Ile Ala Phe Phe Ser Leu Leu Leu
705                 710                 715                 720
Phe Leu Thr Ser Phe Phe Phe Ala Met Ala Leu Lys Cys Val Lys Thr
                725                 730                 735
```

```
Ser Arg Phe Phe Pro Ser Val Val Arg Lys Gly Leu Ser Asp Phe Ser
            740                 745                 750
Ser Val Leu Ala Ile Leu Leu Gly Cys Gly Leu Asp Ala Phe Leu Gly
        755                 760                 765
Leu Ala Thr Pro Lys Leu Met Val Pro Arg Glu Phe Lys Pro Thr Leu
    770                 775                 780
Pro Gly Arg Gly Trp Leu Val Ser Pro Phe Gly Ala Asn Pro Trp Trp
785                 790                 795                 800
Trp Ser Val Ala Ala Ala Leu Pro Ala Leu Leu Leu Ser Ile Leu Ile
                805                 810                 815
Phe Met Asp Gln Gln Ile Thr Ala Val Ile Leu Asn Arg Met Glu Tyr
            820                 825                 830
Arg Leu Gln Lys Gly Ala Gly Phe His Leu Asp Leu Phe Cys Val Ala
        835                 840                 845
Val Leu Met Leu Leu Thr Ser Ala Leu Gly Leu Pro Trp Tyr Val Ser
    850                 855                 860
Ala Thr Val Ile Ser Leu Ala His Met Asp Ser Leu Arg Arg Glu Ser
865                 870                 875                 880
Arg Ala Cys Ala Pro Gly Glu Arg Pro Asn Phe Leu Gly Ile Arg Glu
                885                 890                 895
Gln Arg Leu Thr Gly Leu Val Val Phe Ile Leu Thr Gly Ala Ser Ile
            900                 905                 910
Phe Leu Ala Pro Val Leu Lys Phe Ile Pro Met Pro Val Leu Tyr Gly
        915                 920                 925
Ile Phe Leu Tyr Met Gly Val Ala Ala Leu Ser Ser Ile Gln Phe Thr
    930                 935                 940
Asn Arg Val Lys Leu Leu Leu Asp Ala Ser Lys Thr Pro Ala Arg Pro
945                 950                 955                 960
Ala Thr Leu Ala Ala Cys Ala Ser Asp Gln Gly Pro Pro Leu His Ser
                965                 970                 975
His Gln Leu Cys Pro Val Trp Gly Cys Phe Gly Ile Ile Lys Ser Thr
            980                 985                 990
Pro Ala Ala Ile Ile Phe Pro Leu Met Leu Leu Gly Leu Val Gly Val
        995                1000                1005
Arg Lys Ala Leu Glu Arg Val Phe Ser Pro Gln Glu Leu Leu Trp Leu
   1010                1015                1020
Asp Glu Leu Met Pro Glu Glu Glu Arg Ser Ile Pro Glu Lys Gly Leu
1025                1030                1035                1040
Glu Pro Glu His Ser Phe Ser Gly Ser Asp Ser Glu Asp Ser Glu Leu
                1045                1050                1055
Met Tyr Gln Pro Lys Ala Pro Glu Ile Asn Ile Ser Val Asn
            1060                1065                1070
```

<210> 1100
<211> 875
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(875)
<223> X = any amino acid or stop code

<400> 1100

```
Met Gly Leu Lys Ala Arg Arg Ala Ala Gly Ala Ala Gly Gly Gly Gly
  1               5                  10                  15
Asp Gly Gly Gly Gly Gly Gly Gly Ala Ala Asn Pro Ala Gly Gly Asp
             20                  25                  30
Ala Ala Ala Ala Gly Asp Glu Glu Arg Lys Val Gly Leu Ala Pro Gly
```

```
          35                  40                  45
Asp Val Glu Gln Val Thr Leu Ala Leu Gly Ala Gly Ala Asp Lys Asp
     50                  55                  60
Gly Thr Leu Leu Leu Glu Gly Gly Gly Arg Asp Glu Gly Gln Arg Arg
 65                  70                  75                  80
Thr Pro Gln Gly Ile Gly Leu Leu Ala Lys Thr Pro Leu Ser Arg Pro
                 85                  90                  95
Val Lys Arg Asn Asn Ala Lys Tyr Arg Arg Ile Gln Thr Leu Ile Tyr
            100                 105                 110
Asp Ala Leu Glu Arg Pro Arg Gly Trp Ala Leu Leu Tyr His Ala Leu
        115                 120                 125
Val Phe Leu Ile Val Leu Gly Cys Leu Ile Leu Ala Val Leu Thr Thr
    130                 135                 140
Phe Lys Glu Tyr Glu Thr Val Ser Gly Asp Trp Leu Leu Leu Leu Glu
145                 150                 155                 160
Thr Phe Ala Ile Phe Ile Phe Gly Ala Glu Phe Ala Leu Arg Ile Trp
                165                 170                 175
Ala Ala Gly Cys Cys Cys Arg Tyr Lys Gly Trp Arg Gly Arg Leu Lys
            180                 185                 190
Phe Ala Arg Lys Pro Leu Cys Met Leu Asp Ile Phe Val Leu Ile Ala
        195                 200                 205
Ser Val Pro Val Val Ala Val Gly Asn Gln Gly Asn Val Leu Ala Thr
    210                 215                 220
Ser Leu Arg Ser Leu Arg Phe Leu Gln Ile Leu Arg Met Leu Arg Asp
225                 230                 235                 240
Gly Pro Gly Glu Gly Gly Thr Trp Lys Leu Leu Gly Ser Ala Ile Cys
                245                 250                 255
Ala His Ser Lys Glu Leu Ile Thr Ala Trp Tyr Ile Gly Phe Leu Thr
            260                 265                 270
Leu Ile Leu Ser Ser Phe Leu Val Tyr Leu Val Glu Lys Asp Val Pro
        275                 280                 285
Glu Val Asp Ala Gln Gly Glu Glu Met Lys Glu Glu Phe Glu Thr Tyr
    290                 295                 300
Ala Asp Ala Leu Trp Trp Gly Leu Ile Thr Leu Ala Thr Ile Gly Tyr
305                 310                 315                 320
Gly Asp Lys Thr Pro Lys Thr Trp Glu Gly Arg Leu Ile Ala Ala Thr
                325                 330                 335
Phe Ser Leu Ile Gly Val Ser Phe Phe Ala Leu Pro Ala Gly Ile Leu
            340                 345                 350
Gly Ser Gly Leu Ala Leu Lys Val Gln Glu Gln His Arg Gln Lys His
        355                 360                 365
Phe Glu Lys Arg Arg Lys Pro Ala Ala Glu Leu Ile Gln Ala Ala Trp
    370                 375                 380
Arg Tyr Tyr Ala Thr Asn Pro Asn Arg Ile Asp Leu Val Ala Thr Trp
385                 390                 395                 400
Arg Phe Tyr Glu Ser Val Val Ser Phe Pro Phe Phe Arg Lys Glu Gln
                405                 410                 415
Leu Glu Ala Ala Ser Ser Gln Lys Leu Gly Leu Leu Asp Arg Val Arg
            420                 425                 430
Leu Ser Asn Pro Arg Gly Ser Asn Thr Lys Gly Lys Leu Phe Thr Pro
        435                 440                 445
Leu Asn Val Asp Ala Ile Glu Glu Ser Pro Ser Lys Glu Pro Lys Pro
    450                 455                 460
Val Gly Leu Asn Asn Lys Glu Arg Phe Arg Thr Ala Phe Arg Met Lys
465                 470                 475                 480
Ala Tyr Ala Phe Trp Gln Ser Ser Glu Asp Ala Gly Thr Gly Asp Pro
                485                 490                 495
Met Ala Glu Asp Arg Gly Tyr Gly Asn Asp Phe Pro Ile Glu Asp Met
            500                 505                 510
Ile Pro Thr Leu Lys Ala Ala Ile Arg Ala Val Arg Ile Leu Gln Phe
        515                 520                 525
Arg Leu Tyr Lys Lys Lys Phe Lys Glu Thr Leu Arg Pro Tyr Asp Val
    530                 535                 540
Lys Asp Val Ile Glu Gln Tyr Ser Ala Gly His Leu Asp Met Leu Ser
```

```
545                 550                 555                 560
Arg Ile Lys Tyr Leu Gln Thr Arg Ile Asp Met Ile Phe Thr Pro Gly
                565                 570                 575
Pro Pro Ser Thr Pro Lys His Lys Lys Ser Gln Lys Gly Ser Ala Phe
            580                 585                 590
Thr Phe Pro Ser Gln Gln Ser Pro Arg Asn Glu Pro Tyr Val Ala Arg
        595                 600                 605
Pro Ser Thr Ser Glu Ile Glu Asp Gln Arg His Xaa Trp Gly Lys Phe
    610                 615                 620
Val Lys Ser Leu Lys Gly Gln Val Gln Gly Leu Gly Arg Lys Leu Asp
625                 630                 635                 640
Phe Leu Val Asp Met His Met Gln His Met Glu Arg Leu Gln Val Gln
                645                 650                 655
Val Thr Glu Tyr Tyr Pro Thr Lys Gly Thr Ser Ser Pro Ala Glu Ala
            660                 665                 670
Glu Lys Lys Glu Asp Asn Arg Tyr Ser Asp Leu Lys Thr Ile Ile Cys
        675                 680                 685
Asn Tyr Ser Glu Thr Gly Pro Pro Glu Pro Pro Tyr Ser Phe His Gln
    690                 695                 700
Val Thr Ile Asp Lys Val Ser Pro Tyr Gly Phe Phe Ala His Asp Pro
705                 710                 715                 720
Val Asn Leu Pro Arg Gly Gly Pro Ser Ser Gly Lys Val Gln Ala Thr
                725                 730                 735
Pro Pro Ser Ser Ala Thr Thr Tyr Val Glu Arg Pro Thr Val Leu Pro
            740                 745                 750
Ile Leu Thr Leu Leu Asp Ser Arg Val Ser Cys His Ser Gln Ala Asp
        755                 760                 765
Leu Gln Gly Pro Tyr Ser Asp Arg Ile Ser Pro Arg Gln Arg Arg Ser
    770                 775                 780
Ile Thr Arg Asp Ser Asp Thr Pro Leu Ser Leu Met Ser Val Asn His
785                 790                 795                 800
Glu Glu Leu Glu Arg Ser Pro Ser Gly Phe Ser Ile Ser Gln Asp Arg
                805                 810                 815
Asp Asp Tyr Val Phe Gly Pro Asn Gly Gly Ser Ser Trp Met Arg Glu
            820                 825                 830
Lys Arg Tyr Leu Ala Glu Gly Glu Thr Asp Thr Asp Thr Asp Pro Phe
        835                 840                 845
Thr Pro Ser Gly Ser Met Pro Leu Ser Ser Thr Gly Asp Gly Ile Ser
    850                 855                 860
Asp Ser Val Trp Thr Pro Ser Asn Lys Pro Ile
865                 870                 875
```

<210> 1101
<211> 3530
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3530)
<223> X = any amino acid or stop code

<400> 1101

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Arg Thr Arg Gly Ile Ile Glu Phe Asp Pro Lys Tyr Thr Ala Phe Glu
  1               5                  10                  15
Val Glu Glu Asp Val Gly Leu Ile Met Ile Pro Val Val Arg Leu His
             20                  25                  30
Gly Thr Tyr Gly Tyr Val Thr Ala Asp Phe Ile Ser Gln Ser Ser Ser
         35                  40                  45
```

```
Ala Ser Pro Gly Gly Val Asp Tyr Ile Leu His Gly Ser Thr Val Thr
     50                  55                  60
Phe Gln His Gly Gln Asn Leu Ser Phe Ile Asn Ile Ser Ile Ile Asp
 65                  70                  75                  80
Asp Asn Glu Ser Glu Phe Glu Glu Pro Ile Glu Ile Leu Leu Thr Gly
                 85                  90                  95
Ala Thr Gly Gly Ala Val Leu Gly Arg His Leu Val Ser Arg Ile Ile
            100                 105                 110
Ile Ala Lys Ser Asp Ser Pro Phe Gly Val Ile Arg Phe Leu Asn Gln
        115                 120                 125
Ser Lys Ile Ser Ile Ala Asn Pro Asn Ser Thr Met Ile Leu Ser Leu
    130                 135                 140
Val Leu Glu Arg Thr Gly Gly Leu Leu Gly Glu Ile Gln Val Asn Trp
145                 150                 155                 160
Glu Thr Val Gly Pro Asn Ser Gln Glu Ala Leu Leu Pro Gln Asn Arg
                165                 170                 175
Asp Ile Ala Asp Pro Val Ser Gly Leu Phe Tyr Phe Gly Glu Gly Glu
            180                 185                 190
Gly Gly Val Arg Thr Ile Ile Leu Thr Ile Tyr Pro His Glu Glu Ile
        195                 200                 205
Glu Val Glu Glu Thr Phe Ile Ile Lys Leu His Leu Val Lys Gly Glu
    210                 215                 220
Ala Lys Leu Asp Ser Arg Ala Lys Asp Val Thr Leu Thr Ile Gln Glu
225                 230                 235                 240
Phe Gly Asp Pro Asn Gly Val Val Gln Phe Ala Pro Glu Thr Leu Ser
                245                 250                 255
Lys Lys Thr Tyr Ser Glu Pro Leu Ala Leu Glu Gly Pro Leu Leu Ile
            260                 265                 270
Thr Phe Phe Val Arg Arg Val Lys Gly Thr Phe Gly Glu Ile Met Val
        275                 280                 285
Tyr Trp Glu Leu Ser Ser Glu Phe Asp Ile Thr Glu Asp Phe Leu Ser
    290                 295                 300
Thr Ser Gly Phe Phe Thr Ile Ala Asp Gly Glu Ser Glu Ala Ser Phe
305                 310                 315                 320
Asp Val His Leu Leu Pro Asp Glu Val Pro Glu Ile Glu Glu Asp Tyr
                325                 330                 335
Val Ile Gln Leu Val Ser Val Glu Gly Gly Ala Glu Leu Asp Leu Glu
            340                 345                 350
Lys Ser Ile Thr Trp Phe Ser Val Tyr Ala Asn Asp Asp Pro His Gly
        355                 360                 365
Val Phe Ala Leu Tyr Ser Asp Arg Gln Ser Ile Leu Ile Gly Gln Asn
    370                 375                 380
Leu Ile Arg Ser Ile Gln Ile Asn Ile Thr Arg Leu Ala Gly Thr Phe
385                 390                 395                 400
Gly Asp Val Ala Val Gly Leu Arg Ile Ser Ser Asp His Lys Glu Gln
                405                 410                 415
Pro Ile Val Thr Glu Asn Ala Glu Arg Gln Leu Val Val Lys Asp Gly
            420                 425                 430
Ala Thr Tyr Lys Val Asp Val Val Pro Ile Lys Asn Gln Val Phe Leu
        435                 440                 445
Ser Leu Gly Ser Asn Phe Thr Leu Gln Leu Val Thr Val Met Leu Val
    450                 455                 460
Gly Gly Arg Phe Tyr Gly Met Pro Thr Ile Leu Gln Glu Ala Lys Ser
465                 470                 475                 480
Ala Val Leu Pro Val Ser Glu Lys Ala Ala Asn Ser Gln Val Gly Phe
                485                 490                 495
Glu Ser Thr Ala Phe Gln Leu Met Asn Ile Thr Ala Gly Thr Ser His
            500                 505                 510
Val Met Ile Ser Arg Arg Gly Thr Tyr Gly Ala Leu Ser Val Ala Trp
        515                 520                 525
Thr Thr Gly Tyr Ala Pro Gly Leu Glu Ile Pro Glu Phe Ile Val Val
    530                 535                 540
Gly Asn Met Thr Pro Thr Leu Gly Ser Leu Ser Phe Ser His Gly Glu
545                 550                 555                 560
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Gln Arg Lys Gly Val Phe Leu Trp Thr Phe Pro Ser Pro Gly Trp Pro
                565                 570                 575
Glu Ala Phe Val Leu His Leu Ser Gly Val Gln Ser Ser Ala Pro Gly
            580                 585                 590
Gly Ala Gln Leu Arg Ser Gly Phe Ile Val Ala Glu Ile Glu Pro Met
        595                 600                 605
Gly Val Phe Gln Phe Ser Thr Ser Ser Arg Asn Ile Ile Val Ser Glu
    610                 615                 620
Asp Thr Gln Met Ile Arg Leu His Val Gln Arg Leu Phe Gly Phe His
625                 630                 635                 640
Ser Asp Leu Ile Lys Val Ser Tyr Gln Thr Thr Ala Gly Ser Ala Lys
                645                 650                 655
Pro Leu Glu Asp Phe Glu Pro Val Gln Asn Gly Glu Leu Phe Phe Gln
            660                 665                 670
Lys Phe Gln Thr Glu Val Asp Phe Glu Ile Thr Ile Ile Asn Asp Gln
        675                 680                 685
Leu Ser Glu Ile Glu Glu Phe Phe Tyr Ile Asn Leu Thr Ser Val Glu
    690                 695                 700
Ile Arg Gly Leu Gln Lys Phe Asp Val Asn Trp Ser Pro Arg Leu Asn
705                 710                 715                 720
Leu Asp Phe Ser Val Ala Val Ile Thr Ile Leu Asp Asn Asp Asp Leu
                725                 730                 735
Ala Gly Met Asp Ile Ser Phe Pro Glu Thr Thr Val Ala Val Ala Val
            740                 745                 750
Asp Thr Thr Leu Ile Pro Val Glu Thr Glu Ser Thr Thr Tyr Leu Ser
        755                 760                 765
Thr Ser Lys Thr Thr Thr Ile Leu Gln Pro Thr Asn Val Val Ala Ile
    770                 775                 780
Val Thr Glu Ala Thr Gly Val Ser Ala Ile Pro Glu Lys Leu Val Thr
785                 790                 795                 800
Leu His Gly Thr Pro Ala Val Ser Glu Lys Pro Asp Val Ala Thr Val
                805                 810                 815
Thr Ala Asn Val Ser Ile His Gly Thr Phe Ser Leu Gly Pro Ser Ile
            820                 825                 830
Val Tyr Ile Glu Glu Glu Met Lys Asn Gly Thr Phe Asn Thr Ala Glu
        835                 840                 845
Val Leu Ile Arg Arg Thr Gly Gly Phe Thr Gly Asn Val Ser Ile Thr
    850                 855                 860
Val Lys Thr Phe Gly Glu Arg Cys Ala Gln Met Glu Pro Asn Ala Leu
865                 870                 875                 880
Pro Phe Arg Gly Ile Tyr Gly Ile Ser Asn Leu Thr Trp Ala Val Glu
                885                 890                 895
Glu Glu Asp Phe Glu Glu Gln Thr Leu Thr Leu Ile Phe Leu Asp Gly
            900                 905                 910
Glu Arg Glu Arg Lys Val Ser Val Gln Ile Leu Asp Asp Asp Glu Pro
        915                 920                 925
Glu Gly Gln Glu Phe Phe Tyr Val Phe Leu Thr Asn Pro Gln Gly Gly
    930                 935                 940
Ala Gln Ile Val Glu Gly Lys Asp Asp Thr Gly Phe Ala Ala Phe Ala
945                 950                 955                 960
Met Val Ile Ile Thr Gly Ser Asp Leu His Asn Gly Ile Ile Gly Phe
                965                 970                 975
Ser Glu Glu Ser Gln Ser Gly Leu Glu Leu Arg Glu Gly Ala Val Met
            980                 985                 990
Arg Arg Leu His Leu Ile Val Thr Arg Gln Pro Asn Arg Ala Phe Glu
        995                1000                1005
Asp Val Lys Val Phe Trp Arg Val Thr Leu Asn Lys Thr Val Val Val
   1010                1015                1020
Leu Gln Lys Asp Gly Val Asn Leu Met Glu Glu Leu Gln Ser Val Ser
1025                1030                1035                1040
Gly Thr Thr Thr Cys Thr Met Gly Gln Thr Lys Cys Phe Ile Ser Ile
                1045                1050                1055
Glu Leu Lys Pro Glu Lys Val Pro Gln Val Glu Val Tyr Phe Phe Val
            1060                1065                1070
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Glu Leu Tyr Glu Ala Thr Ala Gly Ala Ala Ile Asn Asn Ser Ala Arg
        1075                1080                1085
Phe Ala Gln Ile Lys Ile Leu Glu Ser Asp Glu Ser Gln Ser Leu Val
    1090                1095                1100
Tyr Phe Ser Val Gly Ser Arg Leu Ala Val Ala His Lys Lys Ala Thr
1105                1110                1115                1120
Leu Ile Ser Leu Gln Val Ala Arg Asp Ser Gly Thr Gly Leu Met Met
                1125                1130                1135
Ser Val Asn Phe Ser Thr Gln Glu Leu Arg Ser Ala Glu Thr Ile Gly
            1140                1145                1150
Arg Thr Ile Ile Ser Pro Ala Ile Ser Gly Lys Asp Phe Val Ile Thr
        1155                1160                1165
Glu Gly Thr Leu Val Phe Glu Pro Gly Gln Arg Ser Thr Val Leu Asp
    1170                1175                1180
Val Ile Leu Thr Pro Glu Thr Gly Ser Leu Asn Ser Phe Pro Lys Arg
1185                1190                1195                1200
Phe Gln Ile Val Leu Phe Asp Pro Lys Gly Gly Ala Arg Ile Asp Lys
                1205                1210                1215
Val Tyr Gly Thr Ala Asn Ile Thr Leu Val Ser Asp Ala Asp Ser Gln
            1220                1225                1230
Ala Ile Trp Gly Leu Ala Asp Gln Leu His Gln Pro Val Asn Asp Asp
        1235                1240                1245
Ile Leu Asn Arg Val Leu His Thr Ile Ser Met Lys Val Ala Thr Glu
    1250                1255                1260
Asn Thr Asp Glu Gln Leu Ser Ala Met Met His Leu Ile Glu Lys Ile
1265                1270                1275                1280
Thr Thr Glu Gly Lys Ile Gln Ala Phe Ser Val Ala Ser Arg Thr Leu
                1285                1290                1295
Phe Tyr Glu Ile Leu Cys Ser Leu Ile Asn Pro Lys Arg Lys Asp Thr
            1300                1305                1310
Arg Gly Phe Ser His Phe Ala Glu Leu Thr Glu Asn Phe Ala Phe Ser
        1315                1320                1325
Leu Leu Thr Asn Val Thr Cys Gly Ser Pro Gly Glu Lys Ser Lys Thr
    1330                1335                1340
Ile Leu Asp Ser Cys Pro Tyr Leu Ser Ile Leu Ala Leu His Trp Tyr
1345                1350                1355                1360
Pro Gln Gln Ile Asn Gly His Lys Phe Glu Gly Lys Glu Gly Asp Tyr
                1365                1370                1375
Ile Arg Ile Pro Glu Arg Leu Leu Asp Val Gln Asp Ala Glu Ile Met
            1380                1385                1390
Ala Gly Lys Ser Thr Cys Lys Leu Val Gln Phe Thr Glu Tyr Ser Ser
        1395                1400                1405
Gln Gln Trp Phe Ile Ser Gly Asn Asn Leu Pro Thr Leu Lys Asn Lys
    1410                1415                1420
Val Leu Ser Leu Ser Val Lys Gly Gln Ser Ser Gln Leu Leu Thr Asn
1425                1430                1435                1440
Asp Asn Glu Val Leu Tyr Arg Ile Tyr Ala Ala Glu Pro Arg Ile Ile
                1445                1450                1455
Pro Gln Thr Ser Leu Cys Leu Leu Trp Asn Gln Ala Ala Ala Ser Trp
            1460                1465                1470
Leu Ser Asp Ser Gln Phe Cys Lys Val Ile Glu Glu Thr Ala Asp Tyr
        1475                1480                1485
Val Glu Cys Ala Cys Leu His Met Ser Val Tyr Ala Val Tyr Ala Arg
    1490                1495                1500
Thr Asp Asn Leu Ser Ser Tyr Asn Glu Ala Phe Phe Thr Ser Gly Phe
1505                1510                1515                1520
Ile Cys Ile Ser Gly Leu Cys Leu Ala Val Leu Ser His Ile Phe Cys
                1525                1530                1535
Ala Arg Tyr Ser Met Phe Ala Ala Lys Leu Leu Thr His Met Met Ala
            1540                1545                1550
Ala Ser Leu Gly Thr Gln Ile Leu Phe Leu Ala Ser Ala Tyr Ala Ser
        1555                1560                1565
Pro Gln Leu Ala Glu Glu Ser Cys Ser Ala Met Ala Ala Val Thr His
    1570                1575                1580
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 Tyr Leu Tyr Leu Cys Gln Phe Ser Trp Met Leu Ile Gln Ser Val Asn
1585                1590                1595                1600
 Phe Trp Tyr Val Leu Val Met Asn Asp Glu His Thr Glu Arg Arg Tyr
                1605                1610                1615
 Leu Leu Phe Phe Leu Leu Ser Trp Gly Leu Pro Ala Phe Val Val Ile
            1620                1625                1630
 Leu Leu Ile Val Ile Leu Lys Gly Ile Tyr His Gln Ser Met Ser Gln
        1635                1640                1645
 Ile Tyr Gly Leu Ile His Gly Asp Leu Cys Phe Ile Pro Asn Val Tyr
    1650                1655                1660
 Ala Ala Leu Phe Thr Ala Ala Leu Val Pro Leu Thr Cys Leu Val Val
1665                1670                1675                1680
 Val Phe Val Val Phe Ile His Ala Tyr Gln Val Lys Pro Gln Trp Lys
                1685                1690                1695
 Ala Tyr Asp Asp Val Phe Arg Gly Arg Thr Asn Ala Ala Glu Ile Pro
            1700                1705                1710
 Leu Ile Leu Tyr Leu Phe Ala Leu Ile Ser Val Thr Trp Leu Trp Gly
        1715                1720                1725
 Gly Leu His Met Ala Tyr Arg His Phe Trp Met Leu Val Leu Phe Val
    1730                1735                1740
 Ile Phe Asn Ser Leu Gln Leu Leu Tyr Pro Leu Phe Tyr Phe Leu Leu
1745                1750                1755                1760
 Leu Xaa Asp Gln Ser Ser Ser Ala Ser Pro Gly Gly Val Asp Tyr Ile
                1765                1770                1775
 Leu His Gly Ser Thr Val Thr Phe Gln His Gly Gln Asn Leu Ser Phe
            1780                1785                1790
 Ile Asn Ile Ser Ile Ile Asp Asp Asn Glu Ser Glu Phe Glu Glu Pro
        1795                1800                1805
 Ile Glu Ile Leu Leu Thr Gly Ala Thr Gly Gly Ala Val Leu Gly Arg
    1810                1815                1820
 His Leu Val Ser Arg Ile Ile Ile Ala Lys Ser Asp Ser Pro Phe Gly
1825                1830                1835                1840
 Val Ile Arg Phe Leu Asn Gln Ser Lys Ile Ser Ile Ala Asn Pro Asn
                1845                1850                1855
 Ser Thr Met Ile Leu Ser Leu Val Leu Glu Arg Thr Gly Gly Leu Leu
            1860                1865                1870
 Gly Glu Ile Gln Val Asn Trp Glu Thr Val Gly Pro Asn Ser Gln Glu
        1875                1880                1885
 Ala Leu Leu Pro Gln Asn Arg Asp Ile Ala Asp Pro Val Ser Gly Leu
    1890                1895                1900
 Phe Tyr Phe Gly Glu Gly Glu Gly Gly Val Arg Thr Ile Ile Leu Thr
1905                1910                1915                1920
 Ile Tyr Pro His Glu Glu Ile Glu Val Glu Glu Thr Phe Ile Ile Lys
                1925                1930                1935
 Leu His Leu Val Lys Gly Glu Ala Lys Leu Asp Ser Arg Ala Lys Asp
            1940                1945                1950
 Val Thr Leu Thr Ile Gln Glu Phe Gly Asp Pro Asn Gly Val Val Gln
        1955                1960                1965
 Phe Ala Pro Glu Thr Leu Ser Lys Lys Thr Tyr Ser Glu Pro Leu Ala
    1970                1975                1980
 Leu Glu Gly Pro Leu Leu Ile Thr Phe Phe Val Arg Arg Val Lys Gly
1985                1990                1995                2000
 Thr Phe Gly Glu Ile Met Val Tyr Trp Glu Leu Ser Ser Glu Phe Asp
                2005                2010                2015
 Ile Thr Glu Asp Phe Leu Ser Thr Ser Gly Phe Phe Thr Ile Ala Asp
            2020                2025                2030
 Gly Glu Ser Glu Ala Ser Phe Asp Val His Leu Leu Pro Asp Glu Val
        2035                2040                2045
 Pro Glu Ile Glu Glu Asp Tyr Val Ile Gln Leu Val Ser Val Glu Gly
    2050                2055                2060
 Gly Ala Glu Leu Asp Leu Glu Lys Ser Ile Thr Trp Phe Ser Val Tyr
2065                2070                2075                2080
 Ala Asn Asp Asp Pro His Gly Val Phe Ala Leu Tyr Ser Asp Arg Gln
                2085                2090                2095
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Ser Ile Leu Ile Gly Gln Asn Leu Ile Arg Ser Ile Gln Ile Asn Ile
            2100                2105                2110
Thr Arg Leu Ala Gly Thr Phe Gly Asp Val Ala Val Gly Leu Arg Ile
        2115                2120                2125
Ser Ser Asp His Lys Glu Gln Pro Ile Val Thr Glu Asn Ala Glu Arg
    2130                2135                2140
Gln Leu Val Val Lys Asp Gly Ala Thr Tyr Lys Val Asp Val Val Pro
2145                2150                2155                2160
Ile Lys Asn Gln Val Phe Leu Ser Leu Gly Ser Asn Phe Thr Leu Gln
                2165                2170                2175
Leu Val Thr Val Met Leu Val Gly Gly Arg Phe Tyr Gly Met Pro Thr
            2180                2185                2190
Ile Leu Gln Glu Ala Lys Ser Ala Val Leu Pro Val Ser Glu Lys Ala
        2195                2200                2205
Ala Asn Ser Gln Val Gly Phe Glu Ser Thr Ala Phe Gln Leu Met Asn
    2210                2215                2220
Ile Thr Ala Gly Thr Ser His Val Met Ile Ser Arg Arg Gly Thr Tyr
2225                2230                2235                2240
Gly Ala Leu Ser Val Ala Trp Thr Thr Gly Tyr Ala Pro Gly Leu Glu
                2245                2250                2255
Ile Pro Glu Phe Ile Val Val Gly Asn Met Thr Pro Thr Leu Gly Ser
            2260                2265                2270
Leu Ser Phe Ser His Gly Glu Gln Arg Lys Gly Val Phe Leu Trp Thr
        2275                2280                2285
Phe Pro Ser Pro Gly Trp Pro Glu Ala Phe Val Leu His Leu Ser Gly
    2290                2295                2300
Val Gln Ser Ser Ala Pro Gly Gly Ala Gln Leu Arg Ser Gly Phe Ile
2305                2310                2315                2320
Val Ala Glu Ile Glu Pro Met Gly Val Phe Gln Phe Ser Thr Ser Ser
                2325                2330                2335
Arg Asn Ile Ile Val Ser Glu Asp Thr Gln Met Ile Arg Leu His Val
            2340                2345                2350
Gln Arg Leu Phe Gly Phe His Ser Asp Leu Ile Lys Val Ser Tyr Gln
        2355                2360                2365
Thr Thr Ala Gly Ser Ala Lys Pro Leu Glu Asp Phe Glu Pro Val Gln
    2370                2375                2380
Asn Gly Glu Leu Phe Phe Gln Lys Phe Gln Thr Glu Val Asp Phe Glu
2385                2390                2395                2400
Ile Thr Ile Ile Asn Asp Gln Leu Ser Glu Ile Glu Glu Phe Phe Tyr
                2405                2410                2415
Ile Asn Leu Thr Ser Val Glu Ile Arg Gly Leu Gln Lys Phe Asp Val
            2420                2425                2430
Asn Trp Ser Pro Arg Leu Asn Leu Asp Phe Ser Val Ala Val Ile Thr
        2435                2440                2445
Ile Leu Asp Asn Asp Asp Leu Ala Gly Met Asp Ile Ser Phe Pro Glu
    2450                2455                2460
Thr Thr Val Ala Val Ala Val Asp Thr Thr Leu Ile Pro Val Glu Thr
2465                2470                2475                2480
Glu Ser Thr Thr Tyr Leu Ser Thr Ser Lys Thr Thr Thr Ile Leu Gln
                2485                2490                2495
Pro Thr Asn Val Val Ala Ile Val Thr Glu Ala Thr Gly Val Ser Ala
            2500                2505                2510
Ile Pro Glu Lys Leu Val Thr Leu His Gly Thr Pro Ala Val Ser Glu
        2515                2520                2525
Lys Pro Asp Val Ala Thr Val Thr Ala Asn Val Ser Ile His Gly Thr
    2530                2535                2540
Phe Ser Leu Gly Pro Ser Ile Val Tyr Ile Glu Glu Glu Met Lys Asn
2545                2550                2555                2560
Gly Thr Phe Asn Thr Ala Glu Val Leu Ile Arg Arg Thr Gly Gly Phe
                2565                2570                2575
Thr Gly Asn Val Ser Ile Thr Val Lys Thr Phe Gly Glu Arg Cys Ala
            2580                2585                2590
Gln Met Glu Pro Asn Ala Leu Pro Phe Arg Gly Ile Tyr Gly Ile Ser
        2595                2600                2605
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Asn Leu Thr Trp Ala Val Glu Glu Glu Asp Phe Glu Glu Gln Thr Leu
   2610                2615                2620
Thr Leu Ile Phe Leu Asp Gly Glu Arg Glu Arg Lys Val Ser Val Gln
2625                2630                2635                2640
Ile Leu Asp Asp Asp Glu Pro Glu Gly Gln Glu Phe Phe Tyr Val Phe
                2645                2650                2655
Leu Thr Asn Pro Gln Gly Gly Ala Gln Ile Val Glu Gly Lys Asp Asp
            2660                2665                2670
Thr Gly Phe Ala Ala Phe Ala Met Val Ile Ile Thr Gly Ser Asp Leu
        2675                2680                2685
His Asn Gly Ile Ile Gly Phe Ser Glu Glu Ser Gln Ser Gly Leu Glu
   2690                2695                2700
Leu Arg Glu Gly Ala Val Met Arg Arg Leu His Leu Ile Val Thr Arg
2705                2710                2715                2720
Gln Pro Asn Arg Ala Phe Glu Asp Val Lys Val Phe Trp Arg Val Thr
                2725                2730                2735
Leu Asn Lys Thr Val Val Val Leu Gln Lys Asp Gly Val Asn Leu Met
            2740                2745                2750
Glu Glu Leu Gln Ser Val Ser Gly Thr Thr Thr Cys Thr Met Gly Gln
        2755                2760                2765
Thr Lys Cys Phe Ile Ser Ile Glu Leu Lys Pro Glu Lys Val Pro Gln
   2770                2775                2780
Val Glu Val Tyr Phe Phe Val Glu Leu Tyr Glu Ala Thr Ala Gly Ala
2785                2790                2795                2800
Ala Ile Asn Asn Ser Ala Arg Phe Ala Gln Ile Lys Ile Leu Glu Ser
                2805                2810                2815
Asp Glu Ser Gln Ser Leu Val Tyr Phe Ser Val Gly Ser Arg Leu Ala
            2820                2825                2830
Val Ala His Lys Lys Ala Thr Leu Ile Ser Leu Gln Val Ala Arg Asp
        2835                2840                2845
Ser Gly Thr Gly Leu Met Met Ser Val Asn Phe Ser Thr Gln Glu Leu
   2850                2855                2860
Arg Ser Ala Glu Thr Ile Gly Arg Thr Ile Ile Ser Pro Ala Ile Ser
2865                2870                2875                2880
Gly Lys Asp Phe Val Ile Thr Glu Gly Thr Leu Val Phe Glu Pro Gly
                2885                2890                2895
Gln Arg Ser Thr Val Leu Asp Val Ile Leu Thr Pro Glu Thr Gly Ser
            2900                2905                2910
Leu Asn Ser Phe Pro Lys Arg Phe Gln Ile Val Leu Phe Asp Pro Lys
        2915                2920                2925
Gly Gly Ala Arg Ile Asp Lys Val Tyr Gly Thr Ala Asn Ile Thr Leu
   2930                2935                2940
Val Ser Asp Ala Asp Ser Gln Ala Ile Trp Gly Leu Ala Asp Gln Leu
2945                2950                2955                2960
His Gln Pro Val Asn Asp Asp Ile Leu Asn Arg Val Leu His Thr Ile
                2965                2970                2975
Ser Met Lys Val Ala Thr Glu Asn Thr Asp Glu Gln Leu Ser Ala Met
            2980                2985                2990
Met His Leu Ile Glu Lys Ile Thr Thr Glu Gly Lys Ile Gln Ala Phe
        2995                3000                3005
Ser Val Ala Ser Arg Thr Leu Phe Tyr Glu Ile Leu Cys Ser Leu Ile
   3010                3015                3020
Asn Pro Lys Arg Lys Asp Thr Arg Gly Phe Ser His Phe Ala Glu Leu
3025                3030                3035                3040
Thr Glu Asn Phe Ala Phe Ser Leu Leu Thr Asn Val Thr Cys Gly Ser
                3045                3050                3055
Pro Gly Glu Lys Ser Lys Thr Ile Leu Asp Ser Cys Pro Tyr Leu Ser
            3060                3065                3070
Ile Leu Ala Leu His Trp Tyr Pro Gln Gln Ile Asn Gly His Lys Phe
        3075                3080                3085
Glu Gly Lys Glu Gly Asp Tyr Ile Arg Ile Pro Glu Arg Leu Leu Asp
   3090                3095                3100
Val Gln Asp Ala Glu Ile Met Ala Gly Lys Ser Thr Cys Lys Leu Val
3105                3110                3115                3120
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Gln Phe Thr Glu Tyr Ser Ser Gln Gln Trp Phe Ile Ser Gly Asn Asn
                3125                3130                3135
Leu Pro Thr Leu Lys Asn Lys Val Leu Ser Leu Ser Val Lys Gly Gln
            3140                3145                3150
Ser Ser Gln Leu Leu Thr Asn Asp Asn Glu Val Leu Tyr Arg Ile Tyr
        3155                3160                3165
Ala Ala Glu Pro Arg Ile Ile Pro Gln Thr Ser Leu Cys Leu Leu Trp
    3170                3175                3180
Asn Gln Ala Ala Ala Ser Trp Leu Ser Asp Ser Gln Phe Cys Lys Val
3185                3190                3195                3200
Ile Glu Glu Thr Ala Asp Tyr Val Glu Cys Ala Cys Leu His Met Ser
                3205                3210                3215
Val Tyr Ala Val Tyr Ala Arg Thr Asp Asn Leu Ser Ser Tyr Asn Glu
            3220                3225                3230
Ala Phe Phe Thr Ser Gly Phe Ile Cys Ile Ser Gly Leu Cys Leu Ala
        3235                3240                3245
Val Leu Ser His Ile Phe Cys Ala Arg Tyr Ser Met Phe Ala Ala Lys
    3250                3255                3260
Leu Leu Thr His Met Met Ala Ala Ser Leu Gly Thr Gln Ile Leu Phe
3265                3270                3275                3280
Leu Ala Ser Ala Tyr Ala Ser Pro Gln Leu Ala Glu Glu Ser Cys Ser
                3285                3290                3295
Ala Met Ala Ala Val Thr His Tyr Leu Tyr Leu Cys Gln Phe Ser Trp
            3300                3305                3310
Met Leu Ile Gln Ser Val Asn Phe Trp Tyr Val Leu Val Met Asn Asp
        3315                3320                3325
Glu His Thr Glu Arg Arg Tyr Leu Leu Phe Phe Leu Leu Ser Trp Gly
    3330                3335                3340
Leu Pro Ala Phe Val Val Ile Leu Leu Ile Val Ile Leu Lys Gly Ile
3345                3350                3355                3360
Tyr His Gln Ser Met Ser Gln Ile Tyr Gly Leu Ile His Gly Asp Leu
                3365                3370                3375
Cys Phe Ile Pro Asn Val Tyr Ala Ala Leu Phe Thr Ala Ala Leu Val
            3380                3385                3390
Pro Leu Thr Cys Leu Val Val Val Phe Val Val Phe Ile His Ala Tyr
        3395                3400                3405
Gln Val Lys Pro Gln Trp Lys Ala Tyr Asp Asp Val Phe Arg Gly Arg
    3410                3415                3420
Thr Asn Ala Ala Glu Ile Pro Leu Ile Leu Tyr Leu Phe Ala Leu Ile
3425                3430                3435                3440
Ser Val Thr Trp Leu Trp Gly Gly Leu His Met Ala Tyr Arg His Phe
                3445                3450                3455
Trp Met Leu Val Leu Phe Val Ile Phe Asn Ser Leu Gln Leu Leu Val
            3460                3465                3470
Pro Ser Val Leu Leu Phe Thr Ser Met Arg Ser Thr Phe Phe Ser Phe
        3475                3480                3485
His Thr Gly Thr Leu Thr Ser Arg Glu Lys Lys Ser Thr Phe Val Leu
    3490                3495                3500
Thr Cys Leu Leu Ser Pro Asp Ser Lys Gly Leu Gly Val Leu Cys Phe
3505                3510                3515                3520
Leu Asn Thr Glu Trp Ala Phe Gln Val His
                3525                3530
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<220>
<221> misc_feature
<222> (1)...(945)
<223> X = any amino acid or stop code

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Gly Arg Asp Arg Gly Arg Ser His Ala Ala Glu Ala Pro Gly Asp Pro
35 40 45
Gln Ala Ala Ala Ser Leu Leu Ala Pro Met Asp Val Gly Glu Glu Pro
50 55 60
Leu Glu Lys Ala Ala Arg Ala Arg Thr Ala Lys Asp Pro Asn Thr Tyr
65 70 75 80
Lys Val Leu Ser Leu Val Leu Ser Val Cys Val Leu Thr Thr Ile Leu
85 90 95
Gly Cys Ile Phe Gly Leu Lys Pro Ser Cys Ala Lys Glu Val Lys Ser
100 105 110
Cys Lys Gly Arg Cys Phe Glu Arg Thr Phe Gly Asn Cys Arg Cys Asp
115 120 125
Ala Ala Cys Val Glu Leu Gly Asn Cys Cys Leu Gly Leu Pro Gly Gly
130 135 140
Thr Cys Ile Glu Pro Glu His Ile Trp Thr Cys Asn Lys Phe Arg Cys
145 150 155 160
Gly Glu Lys Arg Leu Thr Arg Ser Leu Cys Ala Cys Ser Asp Asp Cys
165 170 175
Lys Asp Arg Gly Asp Cys Leu Pro Ser Asn Leu Gln Phe Leu Cys Val
180 185 190
Gln Gly Glu Lys Ser Trp Gly Arg Lys Asn Pro Cys Glu Ser His Leu
195 200 205
Met Glu Pro Gln Cys Pro Ala Gly Phe Glu Thr Pro Ser Leu Pro Leu
210 215 220
Leu Ile Phe Ser Leu Asp Gly Phe Arg Ala Glu Tyr Leu His Thr Trp
225 230 235 240
Gly Gly Leu Leu Pro Val Ile Ser Lys Leu Lys Lys Cys Gly Thr Tyr
245 250 255
Thr Lys Asn Met Arg Pro Val Tyr Pro Thr Lys Thr Phe Pro Asn His
260 265 270
Tyr Ser Ile Val Thr Gly Leu Tyr Pro Glu Ser His Gly Ile Ile Asn
275 280 285
Asn Lys Met Tyr Asp Pro Lys Met Asn Ala Ser Phe Ser Leu Lys Ser
290 295 300
Lys Glu Lys Phe Asn Pro Glu Trp Tyr Lys Gly Glu Pro Ile Trp Val
305 310 315 320
Thr Ala Lys Tyr Gln Gly Leu Lys Ser Gly Thr Phe Phe Trp Pro Gly
325 330 335
Ser Asp Val Glu Ile Asn Gly Ile Phe Pro Asp Ile Tyr Lys Met Tyr
340 345 350
Asn Gly Ser Val Pro Phe Glu Glu Arg Ile Leu Ala Val Leu Gln Trp
355 360 365
Leu Gln Leu Pro Lys Asp Glu Arg Pro His Phe Tyr Thr Leu Tyr Leu
370 375 380
Glu Glu Pro Asp Ser Ser Gly His Ser Tyr Gly Pro Val Ser Ser Glu
385 390 395 400
Val Ile Lys Ala Leu Gln Arg Val Asp Gly Met Val Gly Met Leu Met
405 410 415
Asp Gly Leu Lys Glu Leu Asn Leu His Arg Cys Leu Asn Leu Ile Leu
420 425 430
Ile Ser Asp His Gly Met Glu Gln Gly Ser Cys Lys Lys Tyr Ile Tyr
435 440 445
Leu Asn Lys Tyr Leu Gly Asp Val Lys Asn Ile Lys Val Ile Tyr Gly
450 455 460
Pro Ala Ala Arg Leu Arg Pro Ser Asp Val Pro Asp Lys Tyr Tyr Ser

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465                 470                 475                 480
Phe Asn Tyr Glu Gly Ile Ala Arg Asn Leu Ser Cys Arg Glu Pro Asn
                485                 490                 495
Gln His Phe Lys Pro Tyr Leu Lys His Phe Leu Pro Lys Arg Leu His
            500                 505                 510
Phe Ala Lys Ser Asp Arg Ile Glu Pro Leu Thr Phe Tyr Leu Asp Pro
        515                 520                 525
Gln Trp Gln Leu Ala Leu Asn Pro Ser Glu Arg Lys Tyr Cys Gly Ser
    530                 535                 540
Gly Phe His Gly Ser Asp Asn Val Phe Ser Asn Met Gln Ala Leu Phe
545                 550                 555                 560
Val Gly Tyr Gly Pro Gly Phe Lys His Gly Ile Glu Ala Asp Thr Phe
                565                 570                 575
Glu Asn Ile Glu Val Tyr Asn Leu Met Cys Asp Leu Leu Asn Leu Thr
            580                 585                 590
Pro Ala Pro Asn Asn Gly Thr His Gly Ser Leu Asn His Leu Leu Lys
        595                 600                 605
Asn Pro Val Tyr Thr Pro Lys His Pro Lys Glu Val His Pro Leu Val
    610                 615                 620
Gln Cys Pro Phe Thr Arg Asn Pro Arg Asp Asn Leu Gly Cys Ser Cys
625                 630                 635                 640
Asn Pro Ser Ile Leu Pro Ile Glu Asp Phe Gln Thr Gln Phe Asn Leu
                645                 650                 655
Thr Val Ala Glu Glu Lys Ile Ile Lys His Glu Thr Leu Pro Tyr Gly
            660                 665                 670
Arg Pro Arg Val Leu Gln Lys Glu Asn Thr Ile Cys Leu Leu Ser Gln
        675                 680                 685
His Gln Phe Met Ser Gly Tyr Ser Gln Asp Ile Leu Met Pro Leu Trp
    690                 695                 700
Thr Ser Tyr Thr Val Asp Arg Asn Asp Ser Phe Ser Thr Glu Asp Phe
705                 710                 715                 720
Ser Asn Cys Leu Tyr Gln Asp Phe Arg Ile Pro Leu Ser Pro Val His
                725                 730                 735
Lys Cys Ser Phe Tyr Lys Asn Asn Thr Lys Val Ser Tyr Gly Phe Leu
            740                 745                 750
Ser Pro Pro Gln Leu Asn Lys Asn Ser Ser Gly Ile Tyr Ser Glu Ala
        755                 760                 765
Leu Leu Thr Thr Asn Ile Val Pro Met Tyr Gln Ser Phe Gln Val Ile
    770                 775                 780
Trp Arg Tyr Phe His Asp Thr Leu Leu Arg Lys Tyr Ala Glu Glu Arg
785                 790                 795                 800
Asn Gly Val Asn Val Val Ser Gly Pro Val Phe Asp Phe Asp Tyr Asp
                805                 810                 815
Gly Arg Cys Asp Ser Leu Glu Asn Leu Arg Gln Lys Arg Arg Val His
            820                 825                 830
Pro Val Thr Gln Glu Asn Phe Trp Ile Pro Asn Ser Thr Ser Phe Tyr
        835                 840                 845
Val Val Leu Thr Ser Cys Lys Asp Thr Ser Gln Thr Pro Leu His Cys
    850                 855                 860
Glu Asn Leu Asp Thr Leu Gly Phe Pro Phe Cys Leu His Arg Asp Trp
865                 870                 875                 880
Ile Asn Ser Glu Thr Cys Val His Gly Lys His Asp Ser Ser Trp Val
                885                 890                 895
Glu Glu Phe Val Lys Cys Leu His Arg Ala Arg Ile Thr Gly Cys Xaa
            900                 905                 910
Gly Thr Ser Leu Gly Leu Ser Phe Tyr Gln Gln Arg Lys Glu Pro Val
        915                 920                 925
Ser Asp Ile Leu Lys Leu Lys Thr His Leu Pro Thr Phe Ser Gln Glu
    930                 935                 940
Asp
945
```

<210> 1103

<211> 217
<212>Amino acid
<213> Homo sapiens

<400> 1103

```
Thr Val Pro Pro Pro Pro Gly Gly Pro Ser Pro Ala Pro Leu His Pro
 1               5                  10                  15
Lys Arg Ser Pro Thr Ser Thr Gly Glu Ala Glu Leu Lys Glu Glu Arg
            20                  25                  30
Leu Pro Gly Arg Lys Ala Ser Cys Ser Thr Ala Gly Ser Gly Ser Arg
        35                  40                  45
Gly Leu Pro Pro Leu Ser Pro Met Val Ser Ser Ala His Asn Pro Asn
    50                  55                  60
Lys Ala Glu Ile Pro Glu Arg Arg Lys Asp Ser Thr Ser Thr Pro Asn
65                  70                  75                  80
Asn Leu Pro Pro Ser Met Met Thr Arg Arg Asn Thr Tyr Val Cys Thr
                85                  90                  95
Glu Arg Pro Gly Ala Glu Arg Pro Ser Leu Leu Pro Asn Gly Lys Glu
            100                 105                 110
Asn Ser Ser Gly Thr Pro Arg Val Pro Pro Ala Ser Pro Ser Ser His
        115                 120                 125
Ser Leu Ala Pro Pro Ser Gly Glu Arg Ser Arg Leu Ala Arg Gly Ser
    130                 135                 140
Thr Ile Arg Ser Thr Phe His Gly Gly Gln Val Arg Asp Arg Arg Ala
145                 150                 155                 160
Gly Gly Trp Gly Trp Phe Phe Asn Lys His Ala Leu Gln Arg Ala Pro
                165                 170                 175
Arg Asn Ala Gly Ala Pro Ser Leu Met Pro Gly His Arg Thr Val Leu
            180                 185                 190
Ile Asn Tyr Gly Gly Gly Gln Asp Leu Lys Asn Trp Glu Thr Cys Leu
        195                 200                 205
Ala Ala Pro Pro Asn Lys His Arg Arg
    210                 215     217
```

<210> 1104
<211> 436
<212>Amino acid
<213> Homo sapiens

<400> 1104

```
His Thr Leu His His Ser Ser Pro Thr Ser Glu Ala Glu Glu Phe Val
 1               5                  10                  15
Ser Arg Leu Ser Thr Gln Asn Tyr Phe Arg Ser Leu Pro Arg Gly Thr
            20                  25                  30
Ser Asn Met Thr Tyr Gly Thr Phe Asn Phe Leu Gly Gly Arg Leu Met
        35                  40                  45
Ile Pro Asn Thr Gly Ile Ser Leu Leu Ile Pro Pro Asp Ala Ile Pro
    50                  55                  60
Arg Gly Lys Ile Tyr Glu Ile Tyr Leu Thr Leu His Lys Pro Glu Asp
65                  70                  75                  80
Val Arg Leu Pro Leu Ala Gly Cys Gln Thr Leu Leu Ser Pro Ile Val
                85                  90                  95
Ser Cys Gly Pro Pro Gly Val Leu Leu Thr Arg Pro Val Ile Leu Gly
            100                 105                 110
Met Asp His Cys Gly Glu Pro Ser Pro Asp Ser Trp Ser Leu Arg Leu
```

```
        115                 120                 125
Lys Lys Gln Ser Cys Glu Gly Ser Trp Glu Asp Val Leu His Leu Gly
    130                 135                 140
Glu Glu Ala Pro Ser His Leu Tyr Tyr Cys Gln Leu Glu Ala Ser Ala
145                 150                 155                 160
Cys Tyr Val Phe Thr Glu Gln Leu Ser Arg Tyr Ala Leu Val Gly Glu
                165                 170                 175
Ala Leu Ser Val Ala Ala Ala Lys Arg Leu Lys Leu Leu Leu Phe Ala
            180                 185                 190
Pro Val Ala Cys Thr Ser Leu Glu Tyr Asn Ile Leu Val Tyr Cys Leu
        195                 200                 205
His Asp Thr His Asp Ala Leu Asn Val Val Val Gln Leu Glu Lys Gln
    210                 215                 220
Leu Gln Gly Gln Leu Ile Gln Glu Pro Leu Val Leu His Phe Lys Asp
225                 230                 235                 240
Ser Tyr His Asn Leu Arg Leu Ser Ile His Asp Val Pro Ser Ser Leu
                245                 250                 255
Trp Lys Ser Lys Leu Leu Val Ser Tyr Gln Glu Ile Pro Phe Tyr His
            260                 265                 270
Ile Trp Asn Gly Thr Gln Arg Tyr Leu His Cys Thr Phe Thr Leu Glu
        275                 280                 285
Arg Val Ser Pro Ser Thr Ser Asp Leu Ala Cys Lys Leu Trp Val Trp
    290                 295                 300
Gln Val Glu Gly Asp Gly Gln Ser Phe Ser Ile Asn Phe Asn Ile Thr
305                 310                 315                 320
Lys Asp Thr Arg Phe Ala Glu Leu Leu Ala Leu Glu Ser Glu Ala Gly
                325                 330                 335
Val Pro Ala Leu Val Gly Pro Ser Ala Phe Lys Ile Pro Phe Leu Ile
            340                 345                 350
Arg Gln Lys Ile Ile Ser Ser Leu Asp Pro Pro Cys Arg Arg Gly Ala
        355                 360                 365
Asp Trp Arg Thr Leu Ala Gln Lys Leu His Leu Asp Ser His Leu Ser
    370                 375                 380
Phe Phe Ala Ser Lys Pro Ser Pro Thr Ala Met Ile Leu Asn Leu Trp
385                 390                 395                 400
Glu Ala Arg His Phe Pro Asn Gly Asn Leu Ser Gln Leu Ala Ala Ala
                405                 410                 415
Val Ala Gly Thr Gly Pro Ala Gly Arg Trp Leu Leu Ser Gln Cys Ser
            420                 425                 430
Glu Ala Glu Cys
        435 436
```

<210> 1105
<211> 113
<212>Amino acid
<213> Homo sapiens

<400> 1105

```
Gly Ser Ala Ala Gly Gln Val Gln Gln Gln Gln Arg Arg His Gln
  1               5                  10                  15
Gln Gly Lys Val Thr Val Lys Tyr Asp Arg Lys Glu Leu Arg Lys Arg
             20                  25                  30
Leu Val Leu Glu Glu Trp Ile Val Glu Gln Leu Gly Gln Leu Tyr Gly
         35                  40                  45
Cys Glu Glu Glu Glu Met Pro Glu Val Glu Ile Asp Ile Asp Asp Leu
     50                  55                  60
Phe Asp Ala Tyr Ser Asp Glu Gln Arg Ala Ser Lys Leu Gln Glu Ala
 65                  70                  75                  80
Leu Val Asp Cys Tyr Lys Pro Thr Glu Glu Phe Ile Lys Glu Leu Leu
```

```
                  85                  90                  95
Ser Arg Ile Arg Gly Met Arg Lys Leu Ser Pro Pro Gln Lys Lys Ser
             100                 105                 110
Val
113


     <210> 1106
     <211> 464
     <212>Amino acid
     <213> Homo sapiens


     <400> 1106
Ile Met Leu Asp Gly Arg Val Arg Trp Leu Thr Pro Val Ile Ser Ala
 1               5                  10                  15
Leu Trp Glu Ala Glu Met Glu Asp Val Ile Ala Arg Met Gln Asp Glu
            20                  25                  30
Lys Asn Gly Ile Pro Ile Arg Thr Val Lys Ser Phe Leu Ser Lys Ile
        35                  40                  45
Pro Ser Val Phe Ser Gly Ser Asp Ile Val Gln Trp Leu Ile Lys Asn
    50                  55                  60
Leu Thr Ile Glu Asp Pro Val Glu Ala Leu His Leu Gly Thr Leu Met
65                  70                  75                  80
Ala Ala His Gly Tyr Phe Phe Pro Ile Ser Asp His Val Leu Thr Leu
                85                  90                  95
Lys Asp Asp Gly Thr Phe Tyr Arg Phe Gln Thr Pro Tyr Phe Trp Pro
            100                 105                 110
Ser Asn Cys Trp Glu Pro Glu Asn Thr Asp Tyr Ala Val Tyr Leu Cys
        115                 120                 125
Lys Arg Thr Met Gln Asn Lys Ala Arg Leu Glu Leu Ala Asp Tyr Glu
    130                 135                 140
Ala Glu Ser Leu Ala Arg Leu Gln Arg Ala Phe Ala Arg Lys Trp Glu
145                 150                 155                 160
Phe Ile Phe Met Gln Ala Glu Ala Gln Ala Lys Val Asp Lys Lys Arg
                165                 170                 175
Asp Lys Ile Glu Arg Lys Ile Leu Asp Ser Gln Glu Arg Ala Phe Trp
            180                 185                 190
Asp Val His Arg Pro Val Pro Gly Cys Val Asn Thr Thr Glu Val Asp
        195                 200                 205
Ile Lys Lys Ser Ser Arg Met Arg Asn Pro His Lys Thr Arg Lys Ser
    210                 215                 220
Val Tyr Gly Leu Gln Asn Asp Ile Arg Ser His Ser Pro Thr His Thr
225                 230                 235                 240
Pro Thr Pro Glu Thr Lys Pro Pro Thr Glu Asp Glu Leu Gln Gln Gln
                245                 250                 255
Ile Lys Tyr Trp Gln Ile Gln Leu Asp Arg His Arg Leu Lys Met Ser
            260                 265                 270
Lys Val Ala Asp Ser Leu Leu Ser Tyr Thr Glu Gln Tyr Leu Glu Tyr
        275                 280                 285
Asp Pro Phe Leu Leu Pro Pro Asp Pro Ser Asn Pro Trp Leu Ser Asp
    290                 295                 300
Asp Thr Thr Phe Trp Glu Leu Glu Ala Ser Lys Glu Pro Ser Gln Gln
305                 310                 315                 320
Arg Val Lys Arg Trp Gly Phe Gly Met Asp Glu Ala Leu Lys Asp Pro
                325                 330                 335
Val Gly Arg Glu Gln Phe Leu Lys Phe Leu Glu Ser Glu Phe Ser Ser
            340                 345                 350
Glu Asn Leu Arg Phe Trp Leu Ala Val Glu Asp Leu Lys Lys Arg Pro
        355                 360                 365
Ile Lys Glu Val Pro Ser Arg Val Gln Glu Ile Trp Gln Glu Phe Leu
```

```
    370                 375                 380
Ala Pro Gly Ala Pro Ser Ala Ile Asn Leu Asp Ser Lys Ser Tyr Asp
385                 390                 395                 400
Lys Thr Thr Gln Asn Val Lys Glu Pro Gly Arg Tyr Thr Phe Glu Asp
                405                 410                 415
Ala Gln Glu His Ile Tyr Lys Leu Met Lys Ser Asp Ser Tyr Pro Arg
            420                 425                 430
Phe Ile Arg Ser Ser Ala Tyr Gln Glu Leu Leu Gln Ala Lys Lys Lys
        435                 440                 445
Gly Lys Ser Leu Thr Ser Lys Arg Leu Thr Ser Leu Ala Gln Ser Tyr
    450                 455                 460             464
```

<210> 1107
<211> 153
<212>Amino acid
<213> Homo sapiens

<400> 1107

```
Gly Thr Arg Asp Tyr Pro Arg Ile Val Asn His Leu Asp His Thr Tyr
  1               5                  10                  15
Val Thr Ala Pro Gln Ala Phe Met Met Phe Gln Tyr Phe Val Lys Val
            20                  25                  30
Val Pro Thr Val Tyr Met Lys Val Asp Gly Glu Val Leu Thr Thr Asn
        35                  40                  45
Gln Ile Tyr Val Thr Arg His Glu Lys Ala Ala Tyr Val Leu Met Gly
    50                  55                  60
Asp Gln Gly Leu Pro Gly Val Phe Ile Leu Tyr Glu Leu Ser Pro Met
65                  70                  75                  80
Met Val Asn Leu Thr Glu Ile His Thr Phe Phe Ser Leu Phe Leu Thr
                85                  90                  95
Ile Val Gly Ala Thr Ile Gly Gly Met Phe Phe Glu His Phe Val Ile
            100                 105                 110
Asn Tyr Leu Thr His Lys Trp Gly Leu Gly Phe Tyr Phe Lys Asn Glu
        115                 120                 125
Asn Ser Leu Gln Gly Gly His Arg Thr Leu Tyr Gly Val Asn Phe Phe
    130                 135                 140
Met Tyr Trp Ser Leu Arg Gly Gly Ser
145                 150         153
```

<210> 1108
<211> 506
<212>Amino acid
<213> Homo sapiens

<400> 1108

```
Ser Val Trp Trp Asn Ser Gln Arg Gln Phe Val Val Arg Ala Trp Gly
  1               5                  10                  15
Cys Ala Gly Pro Cys Gly Arg Ala Val Phe Leu Ala Phe Gly Leu Gly
            20                  25                  30
Leu Gly Leu Ile Glu Glu Lys Gln Ala Glu Ser Arg Arg Ala Val Ser
        35                  40                  45
Ala Cys Gln Glu Ile Gln Ala Ile Phe Thr Gln Lys Ser Lys Pro Gly
```

```
     50                  55                  60
Pro Asp Pro Leu Asp Thr Arg Arg Leu Gln Gly Phe Arg Leu Glu Glu
 65                  70                  75                  80
Tyr Leu Ile Gly Gln Ser Ile Gly Lys Gly Cys Ser Ala Ala Val Tyr
                 85                  90                  95
Glu Ala Thr Met Pro Thr Leu Pro Gln Asn Leu Glu Val Thr Lys Ser
            100                 105                 110
Thr Gly Leu Leu Pro Gly Arg Gly Pro Gly Thr Ser Ala Pro Gly Glu
        115                 120                 125
Gly Gln Glu Arg Ala Pro Gly Ala Pro Ala Phe Pro Leu Ala Ile Lys
    130                 135                 140
Met Met Trp Asn Ile Ser Ala Gly Ser Ser Ser Glu Ala Ile Leu Asn
145                 150                 155                 160
Thr Met Ser Gln Glu Leu Val Pro Ala Ser Arg Val Ala Leu Ala Gly
                165                 170                 175
Glu Tyr Gly Ala Val Thr Tyr Arg Lys Ser Lys Arg Gly Pro Lys Gln
            180                 185                 190
Leu Ala Pro His Pro Asn Ile Ile Arg Val Leu Arg Ala Phe Thr Ser
        195                 200                 205
Ser Val Pro Leu Leu Pro Gly Ala Leu Val Asp Tyr Pro Asp Val Leu
    210                 215                 220
Pro Ser Arg Leu His Pro Glu Gly Leu Gly His Gly Arg Thr Leu Phe
225                 230                 235                 240
Leu Val Met Lys Asn Tyr Pro Cys Thr Leu Arg Gln Tyr Leu Cys Val
                245                 250                 255
Asn Thr Pro Ser Pro Arg Leu Ala Ala Met Met Leu Leu Gln Leu Leu
            260                 265                 270
Glu Gly Val Asp His Leu Val Gln Gln Gly Ile Ala His Arg Asp Leu
        275                 280                 285
Lys Ser Asp Asn Ile Leu Val Glu Leu Asp Pro Asp Gly Cys Pro Trp
    290                 295                 300
Leu Val Ile Ala Asp Phe Gly Cys Cys Leu Ala Asp Glu Ser Ile Gly
305                 310                 315                 320
Leu Gln Leu Pro Phe Ser Ser Trp Tyr Val Asp Arg Gly Gly Asn Gly
                325                 330                 335
Cys Leu Met Ala Pro Glu Val Ser Thr Ala Arg Pro Gly Pro Arg Ala
            340                 345                 350
Val Ile Asp Tyr Ser Lys Ala Asp Ala Trp Ala Val Gly Ala Ile Ala
        355                 360                 365
Tyr Glu Ile Phe Gly Leu Val Asn Pro Phe Tyr Gly Gln Gly Lys Ala
    370                 375                 380
His Leu Glu Ser Arg Ser Tyr Gln Glu Ala Gln Leu Pro Ala Leu Pro
385                 390                 395                 400
Glu Ser Val Pro Pro Asp Val Arg Gln Leu Val Arg Ala Leu Leu Gln
                405                 410                 415
Arg Glu Ala Ser Lys Arg Pro Ser Ala Arg Val Ala Ala Asn Val Leu
            420                 425                 430
His Leu Ser Leu Trp Gly Glu His Ile Leu Ala Leu Lys Asn Leu Lys
        435                 440                 445
Leu Asp Lys Met Val Gly Trp Leu Leu Gln Gln Ser Ala Ala Thr Leu
    450                 455                 460
Leu Ala Asn Arg Leu Thr Glu Lys Cys Cys Val Glu Thr Lys Met Lys
465                 470                 475                 480
Met Leu Phe Leu Ala Asn Leu Glu Cys Glu Thr Leu Cys Gln Ala Ala
                485                 490                 495
Leu Leu Leu Cys Ser Trp Arg Ala Ala Leu
            500                 505 506
```

<210> 1109
<211> 382
<212>Amino acid
<213> Homo sapiens

<400> 1109

```
Arg Pro Leu Leu Arg Leu Ala Glu Leu Pro Asp His Cys Tyr Arg Met
 1               5                  10                  15
Asn Ser Ser Pro Ala Gly Thr Pro Ser Pro Gln Pro Ser Arg Ala Asn
            20                  25                  30
Gly Asn Ile Asn Leu Gly Pro Ser Ala Asn Pro Asn Ala Gln Pro Thr
        35                  40                  45
Asp Phe Asp Phe Leu Lys Val Ile Gly Lys Gly Asn Tyr Gly Lys Val
    50                  55                  60
Leu Leu Ala Lys Arg Lys Ser Asp Gly Ala Phe Tyr Ala Val Lys Val
65                  70                  75                  80
Leu Gln Lys Lys Ser Ile Leu Lys Lys Lys Glu Gln Ser His Ile Met
                85                  90                  95
Ala Glu Arg Ser Val Leu Leu Lys Asn Val Arg His Pro Phe Leu Val
            100                 105                 110
Gly Leu Arg Tyr Ser Phe Gln Thr Pro Glu Lys Leu Tyr Phe Val Leu
        115                 120                 125
Asp Tyr Val Asn Gly Gly Glu Leu Phe Phe His Leu Gln Arg Glu Arg
    130                 135                 140
Arg Phe Leu Glu Pro Arg Ala Arg Phe Tyr Ala Ala Glu Val Ala Ser
145                 150                 155                 160
Ala Ile Gly Tyr Leu His Ser Leu Asn Ile Ile Tyr Arg Asp Leu Lys
                165                 170                 175
Pro Glu Asn Ile Leu Leu Asp Cys Gln Gly His Val Val Leu Thr Asp
            180                 185                 190
Phe Gly Leu Cys Lys Glu Gly Val Glu Pro Glu Asp Thr Thr Ser Thr
        195                 200                 205
Phe Cys Gly Thr Pro Glu Tyr Leu Ala Pro Glu Val Leu Arg Lys Glu
    210                 215                 220
Pro Tyr Asp Arg Ala Val Asp Trp Trp Cys Leu Gly Ala Val Leu Tyr
225                 230                 235                 240
Glu Met Leu His Gly Leu Pro Pro Phe Tyr Ser Gln Asp Val Ser Gln
                245                 250                 255
Met Tyr Glu Asn Ile Leu His Gln Pro Leu Gln Ile Pro Gly Gly Arg
            260                 265                 270
Thr Val Ala Ala Cys Asp Leu Leu Gln Ser Leu Leu His Lys Asp Gln
        275                 280                 285
Arg Gln Arg Leu Gly Ser Lys Ala Asp Phe Leu Glu Ile Lys Asn His
    290                 295                 300
Val Phe Phe Ser Pro Ile Asn Trp Asp Asp Leu Tyr His Lys Arg Leu
305                 310                 315                 320
Thr Pro Pro Phe Asn Pro Asn Val Thr Gly Pro Ala Asp Leu Lys His
                325                 330                 335
Phe Asp Pro Glu Phe Thr Gln Glu Ala Val Ser Lys Ser Ile Gly Cys
            340                 345                 350
Thr Pro Asp Thr Val Ala Ser Ser Ser Gly Ala Ser Ser Ala Phe Leu
        355                 360                 365
Gly Phe Ser Tyr Ala Pro Glu Asp Asp Asp Ile Leu Asp Cys
    370                 375                 380     382
```

<210> 1110
<211> 535
<212>Amino acid
<213> Homo sapiens

<400> 1110

```
Arg Pro Gln Thr Leu Lys Gly His Gln Glu Lys Ile Arg Gln Arg Gln
 1               5                  10                  15
Ser Ile Leu Pro Pro Pro Gln Gly Pro Ala Pro Ile Pro Phe Gln His
            20                  25                  30
Arg Gly Gly Asp Ser Pro Glu Ala Lys Asn Arg Val Gly Pro Gln Val
        35                  40                  45
Pro Leu Ser Glu Pro Gly Phe Arg Arg Arg Glu Ser Gln Glu Glu Pro
    50                  55                  60
Arg Ala Val Leu Ala Gln Lys Ile Glu Lys Glu Thr Gln Ile Leu Asn
65                  70                  75                  80
Cys Ala Leu Asp Asp Ile Glu Trp Phe Val Ala Arg Leu Gln Lys Ala
                85                  90                  95
Ala Glu Ala Phe Lys Gln Leu Asn Gln Arg Lys Lys Gly Lys Lys Lys
            100                 105                 110
Gly Lys Lys Ala Pro Ala Glu Gly Val Leu Thr Leu Arg Ala Arg Pro
        115                 120                 125
Pro Ser Glu Gly Glu Phe Ile Asp Cys Phe Gln Lys Ile Lys Leu Ala
    130                 135                 140
Ile Asn Leu Leu Ala Lys Leu Gln Lys His Ile Gln Asn Pro Ser Ala
145                 150                 155                 160
Ala Glu Leu Val His Phe Leu Phe Gly Pro Leu Asp Leu Ile Val Asn
                165                 170                 175
Thr Cys Ser Gly Pro Asp Ile Ala Arg Ser Val Ser Cys Pro Leu Leu
            180                 185                 190
Ser Arg Asp Ala Val Asp Phe Leu Arg Gly His Leu Val Pro Lys Glu
        195                 200                 205
Met Ser Leu Trp Glu Ser Leu Gly Glu Ser Trp Met Arg Pro Arg Ser
    210                 215                 220
Glu Trp Pro Arg Glu Pro Gln Val Pro Leu Tyr Val Pro Lys Phe His
225                 230                 235                 240
Ser Gly Trp Glu Pro Pro Val Asp Val Leu Gln Glu Ala Pro Trp Glu
                245                 250                 255
Val Glu Gly Leu Ala Ser Ala Pro Ile Glu Glu Val Ser Pro Val Ser
            260                 265                 270
Arg Gln Ser Ile Arg Asn Ser Gln Lys His Ser Pro Thr Ser Glu Pro
        275                 280                 285
Thr Pro Pro Gly Asp Ala Leu Pro Pro Val Ser Ser Pro His Thr His
    290                 295                 300
Arg Gly Tyr Gln Pro Thr Pro Ala Met Ala Lys Tyr Val Lys Ile Leu
305                 310                 315                 320
Tyr Asp Phe Thr Ala Arg Asn Ala Asn Glu Leu Ser Val Leu Lys Asp
                325                 330                 335
Glu Val Leu Glu Val Leu Glu Asp Gly Arg Gln Trp Trp Lys Leu Arg
            340                 345                 350
Ser Arg Ser Gly Gln Ala Gly Tyr Val Pro Cys Asn Ile Leu Gly Glu
        355                 360                 365
Ala Arg Pro Glu Asp Ala Gly Ala Pro Phe Glu Gln Ala Gly Gln Lys
    370                 375                 380
Tyr Trp Gly Pro Ala Ser Pro Thr His Lys Leu Pro Pro Ser Phe Pro
385                 390                 395                 400
Gly Asn Lys Asp Glu Leu Met Gln His Met Asp Glu Val Asn Asp Glu
                405                 410                 415
Leu Ile Arg Lys Ile Ser Asn Ile Arg Ala Gln Pro Gln Arg His Phe
            420                 425                 430
Arg Val Glu Arg Ser Gln Pro Val Ser Gln Pro Leu Thr Tyr Glu Ser
        435                 440                 445
Gly Pro Asp Glu Val Arg Ala Trp Leu Glu Ala Lys Ala Phe Ser Pro
    450                 455                 460
Arg Ile Val Glu Asn Leu Gly Ile Leu Thr Gly Pro Gln Leu Phe Ser
465                 470                 475                 480
Leu Asn Lys Glu Glu Leu Lys Lys Val Cys Gly Glu Glu Gly Val Arg
                485                 490                 495
Val Tyr Ser Gln Leu Thr Met Gln Lys Ala Phe Leu Glu Lys Gln Gln
```

```
            500                 505                 510
Ser Gly Ser Glu Leu Glu Glu Leu Met Asn Lys Phe His Ser Met Asn
        515                 520                 525
Gln Arg Arg Gly Glu Asp Ser
    530                 535
```

<210> 1111
<211> 346
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> X = any amino acid or stop code

<400> 1111

```
Ala Trp His Glu Gly Leu Val Ser Ser Pro Ala Ile Gly Ala Tyr Leu
  1               5                  10                  15
Ser Ala Ser Tyr Gly Asp Ser Leu Val Val Leu Val Ala Thr Val Val
             20                  25                  30
Ala Leu Leu Asp Ile Cys Phe Ile Leu Val Ala Val Pro Glu Ser Leu
         35                  40                  45
Pro Glu Lys Met Arg Pro Val Ser Trp Gly Ala Gln Ile Ser Trp Lys
     50                  55                  60
Gln Ala Asp Pro Phe Ala Ser Leu Lys Lys Val Gly Lys Asp Ser Thr
 65                  70                  75                  80
Val Leu Leu Ile Cys Ile Thr Val Cys Leu Ser Tyr Leu Pro Glu Ala
                 85                  90                  95
Gly Gln Tyr Ser Ser Phe Phe Leu Tyr Leu Arg Gln Val Ile Gly Phe
            100                 105                 110
Gly Ser Val Lys Ile Ala Ala Phe Ile Ala Met Val Gly Ile Leu Ser
        115                 120                 125
Ile Val Ala Gln Thr Ala Phe Leu Ser Ile Leu Met Arg Ser Leu Gly
    130                 135                 140
Asn Lys Asn Thr Val Leu Leu Gly Leu Gly Phe Gln Met Leu Gln Leu
145                 150                 155                 160
Ala Trp Tyr Gly Phe Gly Ser Gln Ala Trp Met Met Trp Ala Ala Gly
                165                 170                 175
Thr Val Ala Ala Met Ser Ser Ile Thr Phe Pro Ala Ile Ser Ala Leu
            180                 185                 190
Val Ser Arg Asn Ala Glu Ser Asp Gln Gln Gly Val Ala Gln Gly Ile
        195                 200                 205
Ile Thr Gly Ile Arg Gly Leu Cys Asn Gly Leu Gly Pro Ala Leu Tyr
    210                 215                 220
Gly Phe Ile Phe Tyr Met Phe His Val Glu Leu Thr Glu Leu Gly Pro
225                 230                 235                 240
Lys Leu Asn Ser Asn Asn Val Pro Leu Gln Gly Ala Val Ile Pro Gly
                245                 250                 255
Pro Pro Phe Leu Phe Gly Ala Cys Ile Val Leu Met Ser Phe Leu Ala
            260                 265                 270
Ala Leu Phe Ile Pro Glu Tyr Ser Lys Ala Ser Gly Val Gln Lys His
        275                 280                 285
Ser Asn Ser Ser Ser Gly Ser Leu Thr Asn Thr Pro Glu Arg Gly Ser
    290                 295                 300
Asp Glu Asp Ile Glu Pro Leu Leu Gln Asp Ser Ser Ile Trp Glu Leu
305                 310                 315                 320
Ser Ser Phe Glu Glu Pro Gly Asn Gln Cys Thr Glu Leu Xaa Thr Arg
                325                 330                 335
```

```
Gln Lys Val Gly Phe Cys Ile Arg His Leu
            340                 345 346


     <210> 1112
     <211> 647
     <212>Amino acid
     <213> Homo sapiens



     <400> 1112
Met Ala Ala Gly Leu Ala Thr Trp Leu Pro Phe Ala Arg Ala Ala Ala
  1               5                  10                  15
Val Gly Trp Leu Pro Leu Ala Gln Gln Pro Leu Pro Pro Ala Pro Gly
             20                  25                  30
Val Lys Ala Ser Arg Gly Asp Glu Val Leu Val Val Asn Val Ser Gly
         35                  40                  45
Arg Arg Phe Glu Thr Trp Lys Asn Thr Leu Asp Arg Tyr Pro Asp Thr
     50                  55                  60
Leu Leu Gly Ser Ser Glu Lys Glu Phe Phe Tyr Asp Ala Asp Ser Gly
 65                  70                  75                  80
Glu Tyr Phe Phe Asp Arg Asp Pro Asp Met Phe Arg His Val Leu Asn
                 85                  90                  95
Phe Tyr Arg Thr Gly Arg Leu His Cys Pro Arg Gln Glu Cys Ile Gln
            100                 105                 110
Ala Phe Asp Glu Glu Leu Ala Phe Tyr Gly Leu Val Pro Glu Leu Val
        115                 120                 125
Gly Asp Cys Cys Leu Glu Glu Tyr Arg Asp Arg Lys Lys Glu Asn Ala
    130                 135                 140
Glu Arg Leu Ala Glu Asp Glu Glu Ala Glu Gln Ala Gly Asp Gly Pro
145                 150                 155                 160
Ala Leu Pro Ala Gly Ser Ser Leu Arg Gln Arg Leu Trp Arg Ala Phe
                165                 170                 175
Glu Asn Pro His Thr Ser Thr Ala Ala Leu Val Phe Tyr Tyr Val Thr
            180                 185                 190
Gly Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Ile
        195                 200                 205
Pro Cys Arg Gly Ser Ala Arg Arg Ser Ser Arg Glu Gln Pro Cys Gly
    210                 215                 220
Glu Arg Phe Pro Gln Ala Phe Phe Cys Met Asp Thr Ala Cys Val Leu
225                 230                 235                 240
Ile Phe Thr Gly Glu Tyr Leu Leu Arg Leu Phe Ala Ala Pro Ser Arg
                245                 250                 255
Cys Arg Phe Leu Arg Ser Val Met Ser Leu Ile Asp Val Val Ala Ile
            260                 265                 270
Leu Pro Tyr Tyr Ile Gly Leu Leu Val Pro Lys Asn Asp Asp Val Ser
        275                 280                 285
Gly Ala Phe Val Thr Leu Arg Val Phe Arg Val Phe Arg Ile Phe Lys
    290                 295                 300
Phe Ser Arg His Ser Gln Gly Leu Arg Ile Leu Gly Tyr Thr Leu Lys
305                 310                 315                 320
Ser Cys Ala Ser Glu Leu Gly Phe Leu Leu Phe Ser Leu Thr Met Ala
                325                 330                 335
Ile Ile Ile Phe Ala Thr Val Met Phe Tyr Ala Glu Lys Gly Thr Asn
            340                 345                 350
Lys Thr Asn Phe Thr Ser Ile Pro Ala Ala Phe Trp Tyr Thr Ile Val
        355                 360                 365
Thr Met Thr Thr Leu Gly Tyr Gly Asp Met Val Pro Ser Thr Ile Ala
    370                 375                 380
Gly Lys Ile Phe Gly Ser Ile Cys Ser Leu Ser Gly Val Leu Val Ile
385                 390                 395                 400
```

```
Ala Leu Pro Val Pro Val Ile Val Ser Asn Phe Ser Arg Ile Tyr His
                405                 410                 415
Gln Asn Gln Arg Ala Asp Lys Arg Arg Ala Gln Gln Lys Val Arg Leu
            420                 425                 430
Ala Arg Ile Arg Leu Ala Lys Ser Gly Thr Thr Asn Ala Phe Leu Gln
        435                 440                 445
Tyr Lys Gln Asn Gly Gly Leu Glu Asp Ser Gly Ser Gly Glu Glu Gln
    450                 455                 460
Ala Val Cys Val Arg Asn Arg Ser Ala Phe Glu Gln Gln His His His
465                 470                 475                 480
Leu Leu His Cys Leu Glu Lys Thr Thr Cys His Glu Phe Thr Asp Glu
                485                 490                 495
Leu Thr Phe Ser Glu Ala Leu Gly Ala Val Ser Pro Gly Gly Arg Thr
            500                 505                 510
Ser Arg Ser Thr Ser Val Ser Ser Gln Pro Val Gly Pro Gly Ser Leu
        515                 520                 525
Leu Ser Ser Cys Cys Pro Arg Arg Ala Lys Arg Arg Ala Ile Arg Leu
    530                 535                 540
Ala Asn Ser Thr Ala Ser Val Ser Arg Gly Ser Met Gln Glu Leu Asp
545                 550                 555                 560
Met Leu Ala Gly Leu Arg Arg Ser His Ala Pro Gln Ser Arg Ser Ser
                565                 570                 575
Leu Asn Ala Lys Pro His Asp Ser Leu Asp Leu Asn Cys Asp Ser Gly
            580                 585                 590
Asp Phe Val Ala Ala Ile Ile Ser Ile Pro Thr Pro Pro Ala Asn Thr
        595                 600                 605
Pro Asp Glu Ser Gln Pro Ser Ser Pro Gly Gly Gly Gly Arg Ala Gly
    610                 615                 620
Ser Thr Leu Arg Asn Ser Ser Leu Gly Thr Pro Cys Leu Phe Pro Glu
625                 630                 635                 640
Thr Val Lys Ile Ser Ser Leu
                645     647
```

<210> 1113
<211> 220
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(220)
<223> X = any amino acid or stop code

<400> 1113

```
Gly Trp Gly Lys Pro Phe Lys Asp Trp Thr Thr Gly Gly Gln Asp Thr
  1               5                  10                  15
Gly Gly Glu Pro Ala Leu Leu Val Gly Ala Gly Glu Gly Arg Ala Pro
             20                  25                  30
Arg Leu Asn Cys Pro Ser Gly Gln Ile Arg Ser Pro Gly Pro Gly Asp
         35                  40                  45
Leu Ser Ile Tyr Asp Asn Trp Ile Arg Tyr Phe Asn Arg Ser Ser Pro
     50                  55                  60
Val Tyr Gly Leu Val Pro Arg Ser Lys Thr Ser Ala Arg Ile Tyr Pro
 65                  70                  75                  80
Thr Tyr His Thr Ala Phe Asp Thr Phe Asp Tyr Val Asp Lys Phe Leu
                 85                  90                  95
Asp Pro Gly Glu Glu Gly Asp Lys Gly His Pro Glu Thr Arg Thr Gly
            100                 105                 110
Glu Ala Glu Asp Xaa Ala Leu Ala Leu Ser Pro Cys Arg Arg Phe Ser
```

```
        115                 120                 125
Ser His Gln Ala Val Ala Arg Thr Ala Gly Ser Val Ile Leu Arg Leu
    130                 135                 140
Ser Asp Ser Phe Phe Leu Pro Leu Lys Val Ser Asp Tyr Ser Glu Thr
145                 150                 155                 160
Leu Arg Ser Phe Leu Gln Ala Ala Gln Gln Asp Leu Gly Ala Leu Leu
                165                 170                 175
Glu Gln His Ser Ile Ser Leu Gly Pro Leu Val Thr Ala Val Glu Lys
            180                 185                 190
Phe Glu Ala Glu Ala Ala Ala Leu Gly Gln Arg Ile Ser Thr Leu Gln
        195                 200                 205
Lys Gly Ser Pro Asp Pro Leu Gln Val Arg Met Leu
    210                 215                 220
```

<210> 1114
<211> 382
<212>Amino acid
<213> Homo sapiens

<400> 1114

```
Gly Ile Arg Gly Gly Gly Ser Leu Ala Ser Gly Gly Pro Gly Pro Gly
  1               5                  10                  15
His Ala Ser Leu Ser Gln Arg Leu Arg Leu Tyr Leu Ala Asp Ser Trp
             20                  25                  30
Asn Gln Cys Asp Leu Val Ala Leu Thr Cys Phe Leu Leu Gly Val Gly
         35                  40                  45
Cys Arg Leu Thr Pro Gly Leu Tyr His Leu Gly Arg Thr Val Leu Cys
     50                  55                  60
Ile Asp Phe Met Val Phe Thr Val Arg Leu Leu His Ile Phe Thr Val
 65                  70                  75                  80
Asn Lys Gln Leu Gly Pro Lys Ile Val Ile Val Ser Lys Met Met Lys
                 85                  90                  95
Asp Val Phe Phe Phe Leu Phe Phe Leu Gly Val Trp Leu Val Ala Tyr
            100                 105                 110
Gly Val Ala Thr Glu Gly Leu Leu Arg Pro Arg Asp Ser Asp Phe Pro
        115                 120                 125
Ser Ile Leu Arg Arg Val Phe Tyr Arg Pro Tyr Leu Gln Ile Phe Gly
    130                 135                 140
Gln Ile Pro Gln Glu Asp Met Asp Val Ala Leu Met Glu His Ser Asn
145                 150                 155                 160
Cys Ser Ser Glu Pro Gly Phe Trp Ala His Pro Pro Gly Ala Gln Ala
                165                 170                 175
Gly Thr Cys Val Ser Gln Tyr Ala Asn Trp Leu Val Val Leu Leu Leu
            180                 185                 190
Val Ile Phe Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu Ile
        195                 200                 205
Ala Met Phe Ser Tyr Thr Phe Gly Lys Val Gln Gly Asn Ser Asp Leu
    210                 215                 220
Tyr Trp Lys Ala Gln Arg Tyr Arg Leu Ile Arg Glu Phe His Ser Arg
225                 230                 235                 240
Pro Ala Leu Ala Pro Pro Phe Ile Val Ile Ser His Leu Arg Leu Leu
                245                 250                 255
Leu Arg Gln Leu Cys Arg Arg Pro Arg Ser Pro Gln Pro Ser Ser Pro
            260                 265                 270
Ala Leu Glu His Phe Arg Val Tyr Leu Ser Lys Glu Ala Glu Arg Lys
        275                 280                 285
Leu Leu Thr Trp Glu Ser Val His Lys Glu Asn Phe Leu Leu Ala Arg
    290                 295                 300
Ala Arg Asp Lys Arg Glu Ser Asp Ser Glu Arg Leu Lys Arg Thr Ser
```

```
305                 310                 315                 320
Gln Lys Val Asp Leu Ala Leu Lys Gln Leu Gly His Ile Arg Glu Tyr
                325                 330                 335
Glu Gln Arg Leu Lys Val Leu Glu Arg Glu Val Gln Gln Cys Ser Arg
            340                 345                 350
Val Leu Gly Trp Val Ala Glu Ala Leu Ser Arg Ser Ala Leu Leu Pro
        355                 360                 365
Pro Gly Gly Pro Pro Pro Pro Asp Leu Pro Gly Ser Lys Asp
    370                 375                 380     382
```

<210> 1115
<211> 109
<212>Amino acid
<213> *Homo sapiens*

<400> 1115

```
Leu Ile Lys Leu Cys Lys Ser Lys Ala Lys Ser Cys Glu Asn Asp Leu
  1               5                  10                  15
Glu Met Gly Met Leu Asn Ser Lys Phe Lys Lys Thr Arg Tyr Gln Ala
            20                  25                  30
Gly Met Arg Asn Ser Glu Asn Leu Thr Ala Asn Asn Thr Leu Ser Lys
        35                  40                  45
Pro Thr Arg Tyr Gln Gly Glu Leu Lys Glu Ile Lys Gln Asp Ile Ser
    50                  55                  60
Ser Leu Arg Tyr Glu Leu Leu Glu Glu Lys Ser Gln Ala Thr Gly Glu
65                  70                  75                  80
Leu Ala Asp Leu Ile Gln Gln Leu Ser Glu Lys Phe Gly Lys Asn Leu
                85                  90                  95
Asn Lys Asp His Leu Arg Val Asn Lys Gly Lys Asp Ile
            100                 105             109
```

<210> 1116
<211> 679
<212>Amino acid
<213> Homo sapiens

<400> 1116

```
Leu Pro Leu Leu His Ala Gly Phe Asn Arg Arg Phe Met Glu Asn Ser
  1               5                  10                  15
Ser Ile Ile Ala Cys Tyr Asn Glu Leu Ile Gln Ile Glu His Gly Glu
            20                  25                  30
Val Arg Ser Gln Phe Lys Leu Arg Ala Cys Asn Ser Val Phe Thr Ala
        35                  40                  45
Leu Asp His Cys His Glu Ala Ile Glu Ile Thr Ser Asp Asp His Val
    50                  55                  60
Ile Gln Tyr Val Asn Pro Ala Phe Glu Arg Met Met Gly Tyr His Lys
65                  70                  75                  80
Gly Glu Leu Leu Gly Lys Glu Leu Ala Asp Leu Pro Lys Ser Asp Lys
                85                  90                  95
Asn Arg Ala Asp Leu Leu Asp Thr Ile Asn Thr Cys Ile Lys Lys Gly
            100                 105                 110
Lys Glu Trp Gln Gly Val Tyr Tyr Ala Arg Arg Lys Ser Gly Asp Ser
        115                 120                 125
Ile Gln Gln His Val Lys Ile Thr Pro Val Ile Gly Gln Gly Gly Lys
```

```
    130                 135                 140
Ile Arg His Phe Val Ser Leu Lys Lys Leu Cys Cys Thr Thr Asp Asn
145                 150                 155                 160
Asn Lys Gln Ile His Lys Ile His Arg Asp Ser Gly Asp Asn Ser Gln
                165                 170                 175
Thr Glu Pro His Ser Phe Arg Tyr Lys Asn Arg Arg Lys Glu Ser Ile
            180                 185                 190
Asp Val Lys Ser Ile Ser Ser Arg Gly Ser Asp Ala Pro Ser Leu Gln
        195                 200                 205
Asn Arg Arg Tyr Pro Ser Met Ala Arg Ile His Ser Met Thr Ile Glu
    210                 215                 220
Ala Pro Ile Thr Lys Val Ile Asn Ile Ile Asn Ala Ala Gln Glu Asn
225                 230                 235                 240
Ser Pro Val Thr Val Ala Glu Ala Leu Asp Arg Val Leu Glu Ile Leu
                245                 250                 255
Arg Thr Thr Glu Leu Tyr Ser Pro Gln Leu Gly Thr Lys Asp Glu Asp
            260                 265                 270
Pro His Thr Ser Asp Leu Val Gly Gly Leu Met Thr Asp Gly Leu Arg
        275                 280                 285
Arg Leu Ser Gly Asn Glu Tyr Val Phe Thr Lys Asn Val His Gln Ser
    290                 295                 300
His Ser His Leu Ala Met Pro Ile Thr Ile Asn Asp Val Pro Pro Cys
305                 310                 315                 320
Ile Ser Gln Leu Leu Asp Asn Glu Glu Ser Trp Asp Phe Asn Ile Phe
                325                 330                 335
Glu Leu Glu Ala Ile Thr His Lys Arg Pro Leu Val Tyr Leu Gly Leu
            340                 345                 350
Lys Val Phe Ser Arg Phe Gly Val Cys Glu Phe Leu Asn Cys Ser Glu
        355                 360                 365
Thr Thr Leu Arg Ala Trp Phe Gln Val Ile Glu Ala Asn Tyr His Ser
    370                 375                 380
Ser Asn Ala Tyr His Asn Ser Thr His Ala Ala Asp Val Leu His Ala
385                 390                 395                 400
Thr Ala Phe Phe Leu Gly Lys Glu Arg Val Lys Gly Ser Leu Asp Gln
                405                 410                 415
Leu Asp Glu Val Ala Ala Leu Ile Ala Ala Thr Val His Asp Val Asp
            420                 425                 430
His Pro Gly Arg Thr Asn Ser Phe Leu Cys Asn Ala Gly Ser Glu Leu
        435                 440                 445
Ala Val Leu Tyr Asn Asp Thr Ala Val Leu Glu Ser His His Thr Ala
    450                 455                 460
Leu Ala Phe Gln Leu Thr Val Lys Asp Thr Lys Cys Asn Ile Phe Lys
465                 470                 475                 480
Asn Ile Asp Arg Gly Asn His Tyr Arg Thr Leu Arg Gln Ala Ile Ile
                485                 490                 495
Asp Met Val Leu Ala Thr Glu Met Thr Lys His Phe Glu His Val Asn
            500                 505                 510
Lys Phe Val Asn Ser Ile Asn Lys Pro Met Ala Ala Glu Ile Glu Gly
        515                 520                 525
Ser Asp Cys Glu Cys Asn Pro Ala Gly Lys Asn Phe Pro Glu Asn Gln
    530                 535                 540
Ile Leu Ile Lys Arg Met Met Ile Lys Cys Ala Asp Val Ala Asn Pro
545                 550                 555                 560
Cys Arg Pro Leu Asp Leu Cys Ile Glu Trp Ala Gly Arg Ile Ser Glu
                565                 570                 575
Glu Tyr Phe Ala Gln Thr Asp Glu Glu Lys Arg Gln Gly Leu Pro Val
            580                 585                 590
Val Met Pro Val Phe Asp Arg Asn Thr Cys Ser Ile Pro Lys Ser Gln
        595                 600                 605
Ile Ser Phe Ile Asp Tyr Phe Ile Thr Asp Met Phe Asp Ala Trp Asp
    610                 615                 620
Ala Phe Ala His Leu Pro Ala Leu Met Gln His Leu Ala Asp Asn Tyr
625                 630                 635                 640
Lys His Trp Lys Thr Leu Asp Asp Leu Lys Cys Lys Ser Leu Arg Leu
```

```
                645                 650                 655
Pro Ser Asp Arg Leu Lys Pro Ser His Arg Gly Gly Leu Leu Thr Asp
            660                 665                 670
Lys Gly His Cys Glu Ser Gln
        675             679
```

<210> 1117
<211> 1193
<212>Amino acid
<213> Homo sapiens

<400> 1117

```
Ala Phe Leu Ser Lys Val Glu Glu Asp Asp Tyr Pro Ser Glu Glu Leu
  1               5                  10                  15
Leu Glu Asp Glu Asn Ala Ile Asn Ala Lys Arg Ser Lys Glu Lys Asn
             20                  25                  30
Pro Gly Asn Gln Gly Arg Gln Phe Asp Val Asn Leu Gln Val Pro Asp
         35                  40                  45
Arg Ala Val Leu Gly Thr Ile His Pro Asp Pro Glu Ile Glu Glu Ser
     50                  55                  60
Lys Gln Glu Thr Ser Met Ile Leu Asp Ser Glu Lys Thr Ser Glu Thr
 65                  70                  75                  80
Ala Ala Lys Gly Val Asn Thr Gly Gly Arg Glu Pro Asn Thr Met Val
                 85                  90                  95
Glu Lys Glu Arg Pro Leu Ala Asp Lys Lys Ala Gln Arg Pro Phe Glu
            100                 105                 110
Arg Ser Asp Phe Ser Asp Ser Ile Lys Ile Gln Thr Pro Glu Leu Gly
        115                 120                 125
Glu Val Phe Gln Asn Lys Asp Ser Asp Tyr Leu Lys Asn Asp Asn Pro
    130                 135                 140
Glu Glu His Leu Lys Thr Ser Gly Leu Ala Gly Glu Pro Glu Gly Glu
145                 150                 155                 160
Leu Ser Lys Glu Asp His Glu Asn Thr Glu Lys Tyr Met Gly Thr Glu
                165                 170                 175
Ser Gln Gly Ser Ala Ala Ala Glu Pro Glu Asp Asp Ser Phe His Trp
            180                 185                 190
Thr Pro His Thr Ser Val Glu Pro Gly His Ser Asp Lys Arg Glu Asp
        195                 200                 205
Leu Leu Ile Ile Ser Ser Phe Phe Lys Glu Gln Gln Ser Leu Gln Arg
    210                 215                 220
Phe Gln Lys Tyr Phe Asn Val His Glu Leu Glu Ala Leu Leu Gln Glu
225                 230                 235                 240
Met Ser Ser Lys Leu Lys Ser Ala Gln Gln Glu Ser Leu Pro Tyr Asn
                245                 250                 255
Met Glu Lys Val Leu Asp Lys Val Phe Arg Ala Ser Glu Ser Gln Ile
            260                 265                 270
Leu Ser Ile Ala Glu Lys Met Leu Asp Thr Arg Val Ala Glu Asn Arg
        275                 280                 285
Asp Leu Gly Met Asn Glu Asn Asn Ile Phe Glu Glu Ala Ala Val Leu
    290                 295                 300
Asp Asp Ile Gln Asp Leu Ile Tyr Phe Val Arg Tyr Lys His Ser Thr
305                 310                 315                 320
Ala Glu Glu Thr Ala Thr Leu Val Met Ala Pro Pro Leu Glu Glu Gly
                325                 330                 335
Leu Gly Gly Ala Met Glu Glu Met Gln Pro Leu His Glu Asp Asn Phe
            340                 345                 350
Ser Arg Glu Lys Thr Ala Glu Leu Asn Val Gln Val Pro Glu Glu Pro
        355                 360                 365
Thr His Leu Asp Gln Arg Val Ile Gly Asp Thr His Ala Ser Glu Val
```

```
    370                 375                 380
Ser Gln Lys Pro Asn Thr Glu Lys Asp Leu Asp Pro Gly Pro Val Thr
385                 390                 395                 400
Thr Glu Asp Thr Pro Met Asp Ala Ile Asp Ala Asn Lys Gln Pro Glu
                405                 410                 415
Thr Ala Ala Glu Glu Pro Ala Ser Val Thr Pro Leu Glu Asn Ala Ile
            420                 425                 430
Leu Leu Ile Tyr Ser Phe Met Phe Tyr Leu Thr Lys Ser Leu Val Ala
        435                 440                 445
Thr Leu Pro Asp Asp Val Gln Pro Gly Pro Asp Phe Tyr Gly Leu Pro
    450                 455                 460
Trp Lys Pro Val Phe Ile Thr Ala Phe Leu Gly Ile Ala Ser Phe Ala
465                 470                 475                 480
Ile Phe Leu Trp Arg Thr Val Leu Val Val Lys Asp Arg Val Tyr Gln
                485                 490                 495
Val Thr Glu Gln Gln Ile Ser Glu Lys Leu Lys Thr Ile Met Lys Glu
            500                 505                 510
Asn Thr Glu Leu Val Gln Lys Leu Ser Asn Tyr Glu Gln Lys Ile Lys
        515                 520                 525
Glu Ser Lys Lys His Val Gln Glu Thr Arg Lys Gln Asn Met Ile Leu
    530                 535                 540
Ser Asp Glu Ala Ile Lys Tyr Lys Asp Lys Ile Lys Thr Leu Glu Lys
545                 550                 555                 560
Asn Gln Glu Ile Leu Asp Asp Thr Ala Lys Asn Leu Arg Val Met Leu
                565                 570                 575
Glu Ser Glu Arg Glu Gln Asn Val Lys Asn Gln Asp Leu Ile Ser Glu
            580                 585                 590
Asn Lys Lys Ser Ile Glu Lys Leu Lys Asp Val Ile Ser Met Asn Ala
        595                 600                 605
Ser Glu Phe Ser Glu Val Gln Ile Ala Leu Asn Glu Ala Lys Leu Ser
    610                 615                 620
Glu Glu Lys Val Lys Ser Glu Cys His Arg Val Gln Glu Glu Asn Ala
625                 630                 635                 640
Arg Leu Lys Lys Lys Lys Glu Gln Leu Gln Gln Glu Ile Glu Asp Trp
                645                 650                 655
Ser Lys Leu His Ala Glu Leu Ser Glu Gln Ile Lys Ser Phe Glu Lys
            660                 665                 670
Ser Gln Lys Asp Leu Glu Val Ala Leu Thr His Lys Asp Asp Asn Ile
        675                 680                 685
Asn Ala Leu Thr Asn Cys Ile Thr Gln Leu Asn Leu Leu Glu Cys Glu
    690                 695                 700
Ser Glu Ser Glu Gly Gln Asn Lys Gly Gly Asn Asp Ser Asp Glu Leu
705                 710                 715                 720
Ala Asn Gly Glu Val Gly Gly Asp Arg Asn Glu Lys Met Lys Asn Gln
                725                 730                 735
Ile Lys Gln Met Met Asp Val Ser Arg Thr Gln Thr Ala Ile Ser Val
            740                 745                 750
Val Glu Glu Asp Leu Lys Leu Leu Gln Leu Lys Leu Arg Ala Ser Val
        755                 760                 765
Ser Thr Lys Cys Asn Leu Glu Asp Gln Val Lys Lys Leu Glu Asp Asp
    770                 775                 780
Arg Asn Ser Leu Gln Ala Ala Lys Ala Gly Leu Glu Asp Glu Cys Lys
785                 790                 795                 800
Thr Leu Arg Gln Lys Val Glu Ile Leu Asn Glu Leu Tyr Gln Gln Lys
                805                 810                 815
Glu Met Ala Leu Gln Lys Lys Leu Ser Gln Glu Glu Tyr Glu Arg Gln
            820                 825                 830
Glu Arg Glu His Arg Leu Ser Ala Ala Asp Glu Lys Ala Val Ser Ala
        835                 840                 845
Ala Glu Glu Val Lys Thr Tyr Lys Arg Arg Ile Glu Glu Met Glu Asp
    850                 855                 860
Glu Leu Gln Lys Thr Glu Arg Ser Phe Lys Asn Gln Ile Ala Thr His
865                 870                 875                 880
Glu Lys Lys Ala His Glu Asn Trp Leu Lys Ala Arg Ala Ala Glu Arg
```

```
                885                 890                 895
 Ala Ile Ala Glu Glu Lys Arg Glu Ala Ala Asn Leu Arg His Lys Leu
            900                 905                 910
 Leu Asp Leu Thr Gln Lys Met Ala Met Leu Gln Glu Glu Pro Val Ile
        915                 920                 925
 Val Lys Pro Met Pro Gly Lys Pro Asn Thr Gln Asn Pro Pro Arg Arg
    930                 935                 940
 Gly Pro Leu Ser Gln Asn Gly Ser Phe Gly Pro Ser Pro Val Ser Gly
945                 950                 955                 960
 Gly Glu Cys Ser Pro Pro Leu Thr Val Glu Pro Pro Val Arg Pro Leu
                965                 970                 975
 Ser Ala Thr Leu Asn Arg Arg Asp Met Pro Arg Ser Glu Phe Gly Ser
            980                 985                 990
 Leu Asp Gly Pro Leu Pro His Pro Arg Trp Ser Ala Glu Ala Ser Gly
        995                1000                1005
 Lys Pro Ser Pro Ser Asp Pro Gly Ser Gly Thr Ala Thr Met Met Asn
   1010                1015                1020
 Ser Ser Ser Arg Gly Ser Ser Pro Thr Arg Val Leu Asp Glu Gly Lys
1025                1030                1035                1040
 Val Asn Met Ala Pro Lys Gly Pro Pro Pro Phe Pro Gly Val Pro Leu
                1045                1050                1055
 Met Ser Thr Pro Met Gly Gly Pro Val Pro Pro Pro Ile Arg Tyr Gly
            1060                1065                1070
 Pro Pro Pro Gln Leu Cys Gly Pro Phe Gly Pro Arg Pro Leu Pro Pro
        1075                1080                1085
 Pro Phe Gly Pro Gly Met Arg Pro Pro Leu Gly Leu Arg Glu Phe Ala
   1090                1095                1100
 Pro Gly Val Pro Pro Gly Arg Arg Asp Leu Pro Leu His Pro Arg Gly
1105                1110                1115                1120
 Phe Leu Pro Gly His Ala Pro Phe Arg Pro Leu Gly Ser Leu Gly Pro
                1125                1130                1135
 Arg Glu Tyr Phe Ile Pro Gly Thr Arg Leu Pro Pro Pro Thr His Gly
            1140                1145                1150
 Pro Gln Glu Tyr Pro Pro Pro Pro Ala Val Arg Asp Leu Leu Pro Ser
        1155                1160                1165
 Gly Ser Arg Asp Glu Pro Pro Pro Ala Ser Gln Ser Thr Ser Gln Asp
   1170                1175                1180
 Cys Ser Gln Ala Leu Lys Gln Ser Pro
1185                1190        1193
```

<210> 1118
<211> 981
<212>Amino acid
<213> Homo sapiens

<400> 1118

```
 Met Ala Ala Asp Ser Glu Pro Glu Ser Glu Val Phe Glu Ile Thr Asp
   1               5                  10                  15
 Phe Thr Thr Ala Ser Glu Trp Glu Arg Phe Ile Ser Lys Val Glu Glu
              20                  25                  30
 Val Leu Asn Asp Trp Lys Leu Ile Gly Asn Ser Leu Gly Lys Pro Leu
          35                  40                  45
 Glu Lys Gly Ile Phe Thr Ser Gly Thr Trp Glu Glu Lys Ser Asp Glu
      50                  55                  60
 Ile Ser Phe Ala Asp Phe Lys Phe Ser Val Thr His His Tyr Leu Val
  65                  70                  75                  80
 Gln Glu Ser Thr Asp Lys Glu Gly Lys Asp Glu Leu Leu Glu Asp Val
                  85                  90                  95
 Val Pro Gln Ser Met Gln Asp Leu Leu Gly Met Asn Asn Asp Phe Pro
```

```
                100                 105                 110
Pro Arg Ala His Cys Leu Val Arg Trp Tyr Gly Leu Arg Glu Phe Val
        115                 120                 125
Val Ile Ala Pro Ala Ala His Ser Asp Ala Val Leu Ser Glu Ser Lys
    130                 135                 140
Cys Asn Leu Leu Leu Ser Ser Val Ser Ile Ala Leu Gly Asn Thr Gly
145                 150                 155                 160
Cys Gln Val Pro Leu Phe Val Gln Ile His His Lys Trp Arg Arg Met
                165                 170                 175
Tyr Val Gly Glu Cys Gln Gly Pro Gly Val Arg Thr Asp Phe Glu Met
            180                 185                 190
Val His Leu Arg Lys Val Pro Asn Gln Tyr Thr His Leu Ser Gly Leu
        195                 200                 205
Leu Asp Ile Phe Lys Ser Lys Ile Gly Cys Pro Leu Thr Pro Leu Pro
    210                 215                 220
Pro Val Ser Ile Ala Ile Arg Phe Thr Tyr Val Leu Gln Asp Trp Gln
225                 230                 235                 240
Gln Tyr Phe Trp Pro Gln Gln Pro Pro Asp Ile Asp Ala Leu Val Gly
                245                 250                 255
Gly Glu Val Gly Gly Leu Glu Phe Gly Lys Leu Pro Phe Gly Ala Cys
            260                 265                 270
Glu Asp Pro Ile Ser Glu Leu His Leu Ala Thr Thr Trp Pro His Leu
        275                 280                 285
Thr Glu Gly Ile Ile Val Asp Asn Asp Val Tyr Ser Asp Leu Asp Pro
    290                 295                 300
Ile Gln Ala Pro His Trp Ser Val Arg Val Arg Lys Ala Glu Asn Pro
305                 310                 315                 320
Gln Cys Leu Leu Gly Asp Phe Val Thr Glu Phe Phe Lys Ile Cys Arg
                325                 330                 335
Arg Lys Glu Ser Thr Asp Glu Ile Leu Gly Arg Ser Ala Phe Glu Glu
            340                 345                 350
Glu Gly Lys Glu Thr Ala Asp Ile Thr His Ala Leu Ser Lys Leu Thr
        355                 360                 365
Glu Pro Ala Ser Val Pro Ile His Lys Leu Ser Val Ser Asn Met Val
    370                 375                 380
His Thr Ala Lys Lys Lys Ile Arg Lys His Arg Gly Val Glu Glu Ser
385                 390                 395                 400
Pro Leu Asn Asn Asp Val Leu Asn Thr Ile Leu Leu Phe Leu Phe Pro
                405                 410                 415
Asp Ala Val Ser Glu Lys Pro Leu Asp Gly Thr Thr Ser Thr Asp Asn
            420                 425                 430
Asn Asn Pro Pro Ser Glu Ser Glu Asp Tyr Asn Leu Tyr Asn Gln Phe
        435                 440                 445
Lys Ser Ala Pro Ser Asp Ser Leu Thr Tyr Lys Leu Ala Leu Cys Leu
    450                 455                 460
Cys Met Ile Asn Phe Tyr His Gly Gly Leu Lys Gly Val Ala His Leu
465                 470                 475                 480
Trp Gln Glu Phe Val Leu Glu Met Arg Phe Arg Trp Glu Asn Asn Phe
                485                 490                 495
Leu Ile Pro Gly Leu Ala Ser Gly Pro Pro Asp Leu Arg Cys Cys Leu
            500                 505                 510
Leu His Gln Lys Leu Gln Met Leu Asn Cys Cys Ile Glu Arg Lys Lys
        515                 520                 525
Ala Arg Asp Glu Gly Lys Lys Thr Ser Ala Ser Asp Val Thr Asn Ile
    530                 535                 540
Tyr Pro Gly Asp Ala Gly Lys Ala Gly Asp Gln Leu Val Pro Asp Asn
545                 550                 555                 560
Leu Lys Glu Thr Asp Lys Glu Lys Gly Glu Val Gly Lys Ser Trp Asp
                565                 570                 575
Ser Trp Ser Asp Ser Glu Glu Glu Phe Phe Glu Cys Leu Ser Asp Thr
            580                 585                 590
Glu Glu Leu Lys Gly Asn Gly Gln Glu Ser Gly Lys Lys Gly Gly Pro
        595                 600                 605
Lys Glu Met Ala Asn Leu Arg Pro Glu Gly Arg Leu Tyr Gln His Gly
```

```
    610                 615                 620
Lys Leu Thr Leu Leu His Asn Gly Glu Pro Leu Tyr Ile Pro Val Thr
625                 630                 635                 640
Gln Glu Pro Ala Pro Met Thr Glu Asp Leu Leu Glu Glu Gln Ser Glu
                645                 650                 655
Val Leu Ala Lys Leu Gly Thr Ser Ala Glu Gly Ala His Leu Arg Ala
            660                 665                 670
Arg Met Gln Ser Ala Cys Leu Leu Ser Asp Met Glu Ser Phe Lys Ala
        675                 680                 685
Ala Asn Pro Gly Cys Ser Leu Glu Asp Phe Val Arg Trp Tyr Ser Pro
    690                 695                 700
Arg Asp Tyr Ile Glu Glu Glu Val Ile Asp Glu Lys Gly Asn Val Val
705                 710                 715                 720
Leu Lys Gly Glu Leu Ser Ala Arg Met Lys Ile Pro Ser Asn Met Trp
                725                 730                 735
Val Glu Ala Trp Glu Thr Ala Lys Pro Ile Pro Ala Arg Arg Gln Arg
            740                 745                 750
Arg Leu Phe Asp Asp Thr Arg Glu Ala Glu Lys Val Leu His Tyr Leu
        755                 760                 765
Ala Ile Gln Lys Pro Ala Asp Leu Ala Arg His Leu Leu Pro Cys Val
    770                 775                 780
Ile His Ala Ala Val Leu Lys Val Lys Glu Glu Glu Ser Leu Glu Asn
785                 790                 795                 800
Ile Ser Ser Val Lys Lys Ile Ile Lys Gln Ile Ile Ser His Ser Ser
                805                 810                 815
Lys Val Leu His Phe Pro Asn Pro Glu Asp Lys Lys Leu Glu Glu Ile
            820                 825                 830
Ile His Gln Ile Thr Asn Val Glu Ala Leu Ile Ala Arg Ala Arg Ser
        835                 840                 845
Leu Lys Ala Lys Phe Gly Thr Glu Lys Cys Glu Gln Glu Glu Glu Lys
    850                 855                 860
Glu Asp Leu Glu Arg Phe Val Ser Cys Leu Leu Glu Gln Pro Glu Val
865                 870                 875                 880
Leu Val Thr Gly Ala Gly Arg Gly His Ala Gly Arg Ile Ile His Lys
                885                 890                 895
Leu Phe Val Asn Ala Gln Arg Ala Ala Ala Met Thr Pro Pro Glu Glu
            900                 905                 910
Glu Leu Lys Arg Met Gly Ser Pro Glu Glu Arg Arg Gln Asn Ser Val
        915                 920                 925
Ser Asp Phe Pro Pro Pro Ala Gly Arg Glu Phe Ile Leu Arg Thr Thr
    930                 935                 940
Val Pro Arg Pro Ala Pro Tyr Ser Lys Ala Leu Pro Gln Arg Met Tyr
945                 950                 955                 960
Ser Val Leu Thr Lys Glu Asp Phe Arg Leu Ala Gly Ala Phe Ser Ser
                965                 970                 975
Asp Thr Ser Phe Phe
            980 981
```

<210> 1119
<211> 554
<212>Amino acid
<213> Homo sapiens

<400> 1119

```
Ser Pro Thr Arg Thr Gly Asp Arg Ser Val Ser Leu Ile Val Phe Leu
  1               5                  10                  15
Thr Glu Gly Lys Pro Thr Val Gly Glu Thr His Thr Leu Lys Ile Leu
            20                  25                  30
Asn Asn Thr Arg Glu Ala Ala Arg Gly Gln Val Cys Ile Phe Thr Ile
```

```
         35                  40                  45
Gly Ile Gly Asn Asp Val Asp Phe Arg Leu Leu Glu Lys Leu Ser Leu
     50                  55                  60
Glu Asn Cys Gly Leu Thr Arg Arg Val His Glu Glu Glu Asp Ala Gly
 65                  70                  75                  80
Ser Gln Leu Ile Gly Phe Tyr Asp Glu Ile Arg Thr Pro Leu Leu Ser
                 85                  90                  95
Asp Ile Arg Ile Asp Tyr Pro Pro Ser Ser Val Val Gln Ala Thr Lys
            100                 105                 110
Thr Leu Phe Pro Asn Tyr Phe Asn Gly Ser Glu Ile Ile Ile Ala Gly
        115                 120                 125
Lys Leu Val Asp Arg Lys Leu Asp His Leu His Val Glu Val Thr Ala
    130                 135                 140
Ser Asn Ser Lys Lys Phe Ile Ile Leu Lys Thr Asp Val Pro Val Arg
145                 150                 155                 160
Pro Gln Lys Ala Gly Lys Asp Val Thr Gly Ser Pro Arg Pro Gly Gly
                165                 170                 175
Asp Gly Glu Gly Asp Thr Asn His Ile Glu Arg Leu Trp Ser Tyr Leu
            180                 185                 190
Thr Thr Lys Glu Leu Leu Ser Ser Trp Leu Gln Ser Asp Asp Glu Pro
        195                 200                 205
Glu Lys Glu Arg Leu Arg Gln Arg Ala Gln Ala Leu Ala Val Ser Tyr
    210                 215                 220
Arg Phe Leu Thr Pro Phe Thr Ser Met Lys Leu Arg Gly Pro Val Pro
225                 230                 235                 240
Arg Met Asp Gly Leu Glu Glu Ala His Gly Met Ser Ala Ala Met Gly
                245                 250                 255
Pro Glu Pro Val Val Gln Ser Val Arg Gly Ala Gly Thr Gln Pro Gly
            260                 265                 270
Pro Leu Leu Lys Lys Pro Tyr Gln Pro Arg Ile Lys Ile Ser Lys Thr
        275                 280                 285
Ser Val Asp Gly Asp Pro His Phe Val Val Asp Phe Pro Leu Ser Arg
    290                 295                 300
Leu Thr Val Cys Phe Asn Ile Asp Gly Gln Pro Gly Asp Ile Leu Arg
305                 310                 315                 320
Leu Val Ser Asp His Arg Asp Ser Gly Val Thr Val Asn Gly Glu Leu
                325                 330                 335
Ile Gly Ala Pro Ala Pro Pro Asn Gly His Lys Lys Gln Arg Thr Tyr
            340                 345                 350
Leu Arg Thr Ile Thr Ile Leu Ile Asn Lys Pro Glu Arg Ser Tyr Leu
        355                 360                 365
Glu Ile Thr Pro Ser Arg Val Ile Leu Asp Gly Gly Asp Arg Leu Val
    370                 375                 380
Leu Pro Cys Asn Gln Ser Val Val Val Gly Ser Trp Gly Leu Glu Val
385                 390                 395                 400
Ser Val Ser Ala Asn Ala Asn Val Thr Val Thr Ile Gln Gly Ser Ile
                405                 410                 415
Ala Phe Val Ile Leu Ile His Leu Tyr Lys Lys Pro Ala Pro Phe Gln
            420                 425                 430
Arg His His Leu Gly Phe Tyr Ile Ala Asn Ser Glu Gly Leu Ser Ser
        435                 440                 445
Asn Cys His Gly Leu Leu Gly Gln Phe Leu Asn Gln Asp Ala Arg Leu
    450                 455                 460
Thr Glu Asp Pro Ala Gly Pro Ser Gln Asn Leu Thr His Pro Leu Leu
465                 470                 475                 480
Leu Gln Val Gly Glu Gly Pro Glu Ala Val Leu Thr Val Lys Gly His
                485                 490                 495
Gln Val Pro Val Val Trp Lys Gln Arg Lys Ile Tyr Asn Gly Glu Glu
            500                 505                 510
Gln Ile Asp Cys Trp Phe Ala Arg Asn Asn Ala Ala Lys Leu Ile Asp
        515                 520                 525
Gly Glu Tyr Lys Asp Tyr Leu Ala Ser His Pro Phe Asp Thr Gly Met
    530                 535                 540
Thr Leu Gly Gln Gly Met Ser Arg Glu Leu
```

545 550 554

<210> 1120
<211> 107
<212>Amino acid
<213> Homo sapiens

<400> 1120

```
Val Pro Leu Glu Ser Leu Ser Cys Ser His Ala Asp Asn Trp Lys Gln
  1               5                  10                  15
Glu Leu Thr Lys Phe Ile Ser Pro Asp Gln Leu Pro Val Glu Phe Gly
            20                  25                  30
Gly Thr Met Thr Asp Pro Asp Gly Asn Pro Lys Cys Leu Thr Lys Ile
        35                  40                  45
Asn Tyr Gly Gly Glu Val Pro Lys Ser Tyr Tyr Leu Cys Lys Gln Val
    50                  55                  60
Arg Leu Gln Tyr Glu His Thr Arg Ser Val Gly Arg Gly Ser Ser Leu
65                  70                  75                  80
Gln Val Glu Asn Glu Ile Leu Phe Pro Gly Cys Val Leu Arg Cys Pro
                85                  90                  95
Glu Val Leu Gln His Leu Gln Pro Gly Ser Phe
            100                 105     107
```

<210> 1121
<211> 1241
<212>Amino acid
<213> Homo sapiens

<400> 1121

```
Pro Ala Ala Pro Glu His Thr Asp Pro Ser Glu Pro Arg Gly Ser Val
  1               5                  10                  15
Ser Cys Cys Ser Leu Leu Arg Gly Leu Ser Ser Gly Trp Ser Ser Pro
            20                  25                  30
Leu Leu Pro Ala Pro Val Cys Asn Pro Asn Lys Ala Ile Phe Thr Val
        35                  40                  45
Asp Ala Lys Thr Thr Glu Ile Leu Val Ala Asn Asp Lys Ala Cys Gly
    50                  55                  60
Leu Leu Gly Tyr Ser Ser Gln Asp Leu Ile Gly Gln Lys Leu Thr Gln
65                  70                  75                  80
Phe Phe Leu Arg Ser Asp Ser Asp Val Val Glu Ala Leu Ser Glu Glu
                85                  90                  95
His Met Glu Ala Asp Gly His Ala Ala Val Val Phe Gly Thr Val Val
            100                 105                 110
Asp Ile Ile Ser Arg Ser Gly Glu Lys Ile Pro Val Ser Val Trp Met
        115                 120                 125
Lys Arg Met Arg Gln Glu Arg Arg Leu Cys Cys Val Val Val Leu Glu
    130                 135                 140
Pro Val Glu Arg Val Ser Thr Trp Val Ala Phe Gln Ser Asp Gly Thr
145                 150                 155                 160
Val Thr Ser Cys Asp Ser Leu Phe Ala His Leu His Gly Tyr Val Ser
                165                 170                 175
Gly Glu Asp Val Ala Gly Gln His Ile Thr Asp Leu Ile Pro Ser Val
            180                 185                 190
Gln Leu Pro Pro Ser Gly Gln His Ile Pro Lys Asn Leu Lys Ile Gln
```

```
        195                 200                 205
Arg Ser Val Gly Arg Ala Arg Asp Gly Thr Thr Phe Pro Leu Ser Leu
    210                 215                 220
Lys Leu Lys Ser Gln Pro Ser Ser Glu Glu Ala Thr Thr Gly Glu Ala
225                 230                 235                 240
Ala Pro Val Ser Gly Tyr Arg Ala Ser Val Trp Val Phe Cys Thr Ile
                245                 250                 255
Ser Gly Leu Ile Thr Leu Leu Pro Asp Gly Thr Ile His Gly Ile Asn
            260                 265                 270
His Ser Phe Ala Leu Thr Leu Phe Gly Tyr Gly Lys Thr Glu Leu Leu
        275                 280                 285
Gly Lys Asn Ile Thr Phe Leu Ile Pro Gly Phe Tyr Ser Tyr Met Asp
    290                 295                 300
Leu Ala Tyr Asn Ser Ser Leu Gln Leu Pro Asp Leu Ala Ser Cys Leu
305                 310                 315                 320
Asp Val Gly Asn Glu Ser Gly Cys Gly Glu Arg Thr Leu Asp Pro Trp
                325                 330                 335
Gln Gly Gln Asp Pro Ala Glu Gly Gly Gln Asp Pro Arg Ile Asn Val
            340                 345                 350
Val Leu Ala Gly Gly His Val Val Pro Arg Asp Glu Ile Arg Lys Leu
        355                 360                 365
Met Glu Ser Gln Asp Ile Phe Thr Gly Thr Gln Thr Glu Leu Ile Ala
    370                 375                 380
Gly Gly Gln Leu Leu Ser Cys Leu Ser Pro Gln Pro Ala Pro Gly Val
385                 390                 395                 400
Asp Asn Val Pro Glu Gly Ser Leu Pro Val His Gly Glu Gln Ala Leu
                405                 410                 415
Pro Lys Asp Gln Gln Ile Thr Ala Leu Gly Arg Glu Glu Pro Val Ala
            420                 425                 430
Ile Glu Ser Pro Gly Gln Asp Leu Leu Gly Glu Ser Arg Ser Glu Pro
        435                 440                 445
Val Asp Val Lys Pro Phe Ala Ser Cys Glu Asp Ser Glu Ala Pro Val
    450                 455                 460
Pro Ala Glu Asp Gly Gly Ser Asp Ala Gly Met Cys Gly Leu Cys Gln
465                 470                 475                 480
Lys Ala Gln Leu Glu Arg Met Gly Val Ser Gly Pro Ser Gly Ser Asp
                485                 490                 495
Leu Trp Ala Gly Ala Ala Val Ala Lys Pro Gln Ala Lys Gly Gln Leu
            500                 505                 510
Ala Gly Gly Ser Leu Leu Met His Cys Pro Cys Tyr Gly Ser Glu Trp
        515                 520                 525
Gly Leu Trp Trp Arg Ser Gln Asp Leu Ala Pro Ser Pro Ser Gly Met
    530                 535                 540
Ala Gly Leu Ser Phe Gly Thr Pro Thr Leu Asp Glu Pro Trp Leu Gly
545                 550                 555                 560
Val Glu Asn Asp Arg Glu Glu Leu Gln Thr Cys Leu Ile Lys Glu Gln
                565                 570                 575
Leu Ser Gln Leu Ser Leu Ala Gly Ala Leu Asp Val Pro His Ala Glu
            580                 585                 590
Leu Val Pro Thr Glu Cys Gln Ala Val Thr Ala Pro Val Ser Ser Cys
        595                 600                 605
Asp Leu Gly Gly Arg Asp Leu Cys Gly Gly Cys Thr Gly Ser Ser Ser
    610                 615                 620
Ala Cys Tyr Ala Leu Ala Thr Asp Leu Pro Gly Gly Leu Glu Ala Val
625                 630                 635                 640
Glu Ala Gln Glu Val Asp Val Asn Ser Phe Ser Trp Asn Leu Lys Glu
                645                 650                 655
Leu Phe Phe Ser Asp Gln Thr Asp Gln Thr Ser Ser Asn Cys Ser Cys
            660                 665                 670
Ala Thr Ser Glu Leu Arg Glu Thr Pro Ser Ser Leu Ala Val Gly Ser
        675                 680                 685
Asp Pro Asp Val Gly Ser Leu Gln Glu Gln Gly Ser Cys Val Leu Asp
    690                 695                 700
Asp Arg Glu Leu Leu Leu Leu Thr Gly Thr Cys Val Asp Leu Gly Gln
```

```
705                 710                 715                 720
Gly Arg Arg Phe Arg Glu Ser Cys Val Gly His Asp Pro Thr Glu Pro
                725                 730                 735
Leu Glu Val Cys Leu Val Ser Ser Glu His Tyr Ala Ala Ser Asp Arg
            740                 745                 750
Glu Ser Pro Gly His Val Pro Ser Thr Leu Asp Ala Gly Pro Glu Asp
        755                 760                 765
Thr Cys Pro Ser Ala Glu Glu Pro Arg Leu Asn Val Gln Val Thr Ser
    770                 775                 780
Thr Pro Val Ile Val Met Arg Gly Ala Ala Gly Leu Gln Arg Glu Ile
785                 790                 795                 800
Gln Glu Gly Ala Tyr Ser Gly Ser Cys Tyr His Arg Asp Gly Leu Arg
                805                 810                 815
Leu Ser Ile Gln Phe Glu Val Arg Arg Val Glu Leu Gln Gly Pro Thr
            820                 825                 830
Pro Leu Phe Cys Cys Trp Leu Val Lys Asp Leu Leu His Ser Gln Arg
        835                 840                 845
Asp Ser Ala Ala Arg Thr Arg Leu Phe Leu Ala Ser Leu Pro Gly Ser
    850                 855                 860
Thr His Ser Thr Ala Ala Glu Leu Thr Gly Pro Ser Leu Val Glu Val
865                 870                 875                 880
Leu Arg Ala Arg Pro Trp Phe Glu Glu Pro Pro Lys Ala Val Glu Leu
                885                 890                 895
Glu Gly Leu Ala Ala Cys Glu Gly Glu Tyr Ser Gln Lys Tyr Ser Thr
            900                 905                 910
Met Ser Pro Leu Gly Ser Gly Ala Phe Gly Phe Val Trp Thr Ala Val
        915                 920                 925
Asp Lys Glu Lys Asn Lys Glu Val Val Val Lys Phe Ile Lys Lys Glu
    930                 935                 940
Lys Val Leu Glu Asp Cys Trp Ile Glu Asp Pro Lys Leu Gly Lys Val
945                 950                 955                 960
Thr Leu Glu Ile Ala Ile Leu Ser Arg Val Glu His Ala Asn Ile Ile
                965                 970                 975
Lys Val Leu Asp Ile Phe Glu Asn Gln Gly Phe Phe Gln Leu Val Met
            980                 985                 990
Glu Lys His Gly Ser Gly Leu Asp Leu Phe Ala Phe Ile Asp Arg His
        995                1000                1005
Pro Arg Leu Asp Glu Pro Leu Ala Ser Tyr Ile Phe Arg Gln Val Arg
   1010                1015                1020
Ala Gly Gln Ser Arg Leu Val Ser Ala Val Gly Tyr Leu Arg Leu Lys
1025                1030                1035                1040
Asp Ile Ile His Arg Asp Ile Lys Asp Glu Asn Ile Val Ile Ala Glu
                1045                1050                1055
Asp Phe Thr Ile Lys Leu Ile Asp Phe Gly Ser Ala Ala Tyr Leu Glu
            1060                1065                1070
Arg Gly Lys Leu Phe Tyr Thr Phe Cys Gly Thr Ile Glu Tyr Cys Ala
        1075                1080                1085
Pro Glu Val Leu Met Gly Asn Pro Tyr Arg Gly Pro Glu Leu Glu Met
   1090                1095                1100
Trp Ser Leu Gly Val Thr Leu Tyr Thr Leu Val Phe Glu Glu Asn Pro
1105                1110                1115                1120
Phe Cys Glu Leu Glu Glu Thr Val Glu Ala Ala Ile His Pro Pro Tyr
                1125                1130                1135
Leu Val Ser Lys Glu Leu Met Ser Leu Val Ser Gly Leu Leu Gln Pro
            1140                1145                1150
Val Pro Glu Arg Arg Thr Thr Leu Glu Lys Leu Val Thr Asp Pro Trp
        1155                1160                1165
Val Thr Gln Pro Val Asn Leu Ala Asp Tyr Thr Trp Glu Glu Val Phe
   1170                1175                1180
Arg Val Asn Lys Pro Glu Ser Gly Val Leu Ser Ala Ala Ser Leu Glu
1185                1190                1195                1200
Met Gly Asn Arg Ser Leu Ser Asp Val Ala Gln Ala Gln Glu Leu Cys
                1205                1210                1215
Gly Gly Pro Val Pro Gly Glu Ala Pro Asn Gly Gln Gly Cys Leu His
```

1220 1225 1230
Pro Gly Asp Pro Arg Leu Leu Thr Ser
1235 12401241

<210> 1122
<211> 395
<212>Amino acid
<213> Homo sapiens

<400> 1122
Pro Gly Thr Ser Ala Ala Thr Cys Arg Phe Leu Ser Pro Pro Val Ile
1 5 10 15
Ser Leu Ser Phe Thr Gly Leu Cys Ile Ser Asp Leu Val Val Ala Val
20 25 30
Asn Gly Val Trp Ile Leu Val Glu Thr Phe Met Leu Lys Gly Gly Asn
35 40 45
Phe Phe Ser Lys His Val Pro Trp Ser Tyr Leu Val Phe Leu Thr Ile
50 55 60
Tyr Gly Val Glu Leu Phe Leu Lys Val Ala Gly Leu Gly Pro Val Glu
65 70 75 80
Tyr Leu Ser Ser Gly Trp Asn Leu Phe Asp Phe Ser Val Thr Val Phe
85 90 95
Ala Phe Leu Gly Leu Leu Ala Leu Ala Leu Asn Met Glu Pro Phe Tyr
100 105 110
Phe Ile Val Val Leu Arg Pro Leu Gln Leu Leu Arg Leu Phe Lys Leu
115 120 125
Lys Glu Arg Tyr Arg Asn Val Leu Asp Thr Met Phe Glu Leu Leu Pro
130 135 140
Arg Met Ala Ser Leu Gly Leu Thr Leu Leu Ile Phe Tyr Tyr Ser Phe
145 150 155 160
Ala Ile Val Gly Met Glu Phe Phe Cys Gly Ile Val Phe Pro Asn Cys
165 170 175
Cys Asn Thr Ser Thr Val Ala Asp Ala Tyr Arg Trp Arg Asn His Thr
180 185 190
Val Gly Asn Arg Thr Val Val Glu Glu Gly Tyr Tyr Tyr Leu Asn Asn
195 200 205
Phe Asp Asn Ile Leu Asn Ser Phe Val Thr Leu Phe Glu Leu Thr Val
210 215 220
Val Asn Asn Trp Tyr Ile Ile Met Glu Gly Val Thr Ser Gln Thr Ser
225 230 235 240
His Trp Ser Arg Leu Tyr Phe Met Thr Phe Tyr Ile Val Thr Met Val
245 250 255
Val Met Thr Ile Ile Val Ala Phe Ile Leu Glu Ala Phe Val Phe Arg
260 265 270
Met Asn Tyr Ser Arg Lys Asn Gln Asp Ser Glu Val Asp Gly Gly Ile
275 280 285
Thr Leu Glu Lys Glu Ile Ser Lys Glu Glu Leu Val Ala Val Leu Glu
290 295 300
Leu Tyr Arg Glu Ala Arg Gly Ala Ser Ser Asp Val Thr Arg Leu Leu
305 310 315 320
Glu Thr Leu Ser Gln Met Glu Arg Tyr Gln Gln His Ser Met Val Phe
325 330 335
Leu Gly Arg Arg Ser Arg Thr Lys Ser Asp Leu Ser Leu Lys Met Tyr
340 345 350
Gln Glu Glu Ile Gln Glu Trp Tyr Glu Glu His Ala Arg Glu Gln Glu
355 360 365
Gln Gln Arg Gln Leu Ser Ser Ser Ala Ala Pro Ala Ala Gln Gln Pro
370 375 380
Pro Gly Ser Arg Gln Arg Ser Gln Thr Val Thr

385 390 395

<210> 1123
<211> 328
<212>Amino acid
<213> Homo sapiens

<400> 1123

```
Leu Ala Gly Val Gly Thr Gln Ala Pro Pro Arg Arg Pro Gly Gly Glu
  1               5                  10                  15
Met Ala Ala Gly Gln Asn Gly His Glu Glu Trp Val Gly Ser Ala Tyr
             20                  25                  30
Leu Phe Val Glu Ser Ser Leu Asp Lys Val Val Leu Ser Asp Ala Tyr
         35                  40                  45
Ala His Pro Gln Gln Lys Val Ala Val Tyr Arg Ala Leu Gln Ala Ala
     50                  55                  60
Leu Ala Glu Ser Gly Gly Ser Pro Asp Val Leu Gln Met Leu Lys Ile
 65                  70                  75                  80
His Arg Ser Asp Pro Gln Leu Ile Val Gln Leu Arg Phe Cys Gly Arg
                 85                  90                  95
Gln Pro Cys Gly Arg Phe Leu Arg Ala Tyr Arg Glu Gly Ala Leu Arg
            100                 105                 110
Ala Ala Leu Gln Arg Ser Leu Ala Ala Ala Leu Ala Gln His Ser Val
        115                 120                 125
Pro Leu Gln Leu Asp Leu Arg Ala Gly Ala Glu Arg Leu Glu Ala Leu
    130                 135                 140
Leu Ala Asp Glu Glu Arg Cys Leu Ser Cys Ile Leu Ala Gln Gln Pro
145                 150                 155                 160
Asp Arg Leu Arg Asp Glu Glu Leu Ala Glu Leu Glu Asp Ala Leu Arg
                165                 170                 175
Asn Leu Lys Cys Gly Ser Gly Ala Arg Gly Gly Asp Gly Glu Val Ala
            180                 185                 190
Ser Ala Pro Leu Gln Pro Pro Val Pro Ser Leu Ser Glu Val Lys Pro
        195                 200                 205
Pro Pro Pro Pro Pro Pro Ala Gln Thr Phe Leu Phe Gln Gly Gln Pro
    210                 215                 220
Val Val Asn Arg Pro Leu Ser Leu Lys Asp Gln Gln Thr Phe Ala Arg
225                 230                 235                 240
Ser Val Gly Leu Lys Trp Arg Lys Val Gly Arg Ser Leu Gln Arg Gly
                245                 250                 255
Cys Arg Ala Leu Arg Asp Pro Ala Leu Asp Ser Leu Ala Tyr Glu Tyr
            260                 265                 270
Glu Arg Glu Gly Leu Tyr Glu Gln Ala Phe Gln Leu Leu Arg Arg Phe
        275                 280                 285
Val Gln Ala Glu Gly Arg Arg Ala Thr Leu Gln Arg Leu Val Glu Ala
    290                 295                 300
Leu Glu Glu Asn Glu Leu Thr Ser Leu Ala Glu Asp Leu Leu Gly Leu
305                 310                 315                 320
Thr Asp Pro Asn Gly Gly Leu Ala
                325                 328
```

<210> 1124
<211> 667
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(667)
<223> X = any amino acid or stop code

<400> 1124

```
Ser Ser Lys Pro Lys Leu Lys Lys Arg Phe Ser Leu Arg Ser Val Gly
  1               5                  10                  15
Arg Ser Val Arg Gly Ser Val Arg Gly Ile Leu Gln Trp Arg Gly Thr
            20                  25                  30
Val Asp Pro Pro Ser Ser Ala Gly Pro Leu Glu Thr Ser Ser Gly Pro
        35                  40                  45
Pro Val Leu Gly Gly Asn Ser Asn Ser Asn Ser Ser Gly Gly Ala Gly
    50                  55                  60
Thr Val Gly Arg Gly Leu Val Ser Asp Gly Thr Ser Pro Gly Glu Arg
65                  70                  75                  80
Trp Thr His Arg Phe Glu Arg Leu Arg Leu Ser Arg Gly Gly Gly Ala
                85                  90                  95
Leu Lys Asp Gly Ala Gly Met Val Gln Arg Glu Glu Leu Leu Ser Phe
            100                 105                 110
Met Gly Ala Glu Glu Ala Ala Pro Asp Pro Ala Gly Val Gly Arg Gly
        115                 120                 125
Gly Gly Val Ala Gly Pro Pro Ser Gly Gly Gly Gly Gln Pro Gln Trp
    130                 135                 140
Gln Lys Cys Arg Leu Leu Leu Arg Ser Glu Gly Glu Gly Gly Gly Gly
145                 150                 155                 160
Ser Arg Leu Glu Phe Phe Val Pro Pro Lys Ala Ser Arg Pro Arg Leu
                165                 170                 175
Ser Ile Pro Cys Ser Ser Ile Thr Asp Val Arg Thr Thr Thr Ala Leu
            180                 185                 190
Glu Met Pro Asp Arg Glu Asn Thr Phe Val Val Lys Val Glu Gly Pro
        195                 200                 205
Ser Glu Tyr Ile Met Glu Thr Val Asp Ala Gln His Val Lys Ala Trp
    210                 215                 220
Val Ser Asp Ile Gln Glu Cys Leu Ser Pro Gly Pro Cys Pro Ala Thr
225                 230                 235                 240
Ser Pro Arg Pro Met Thr Leu Pro Leu Ala Pro Gly Thr Ser Phe Leu
                245                 250                 255
Thr Arg Glu Asn Thr Asp Ser Leu Glu Leu Ser Cys Leu Asn His Ser
            260                 265                 270
Glu Ser Leu Pro Ser Gln Asp Leu Leu Leu Gly Pro Ser Glu Ser Asn
        275                 280                 285
Asp Arg Leu Ser Gln Gly Ala Tyr Gly Gly Leu Ser Asp Arg Pro Ser
    290                 295                 300
Ala Ser Ile Ser Pro Ser Ser Ala Ser Ile Ala Ala Ser His Phe Asp
305                 310                 315                 320
Ser Met Glu Leu Leu Pro Pro Glu Leu Pro Pro Arg Ile Pro Ile Glu
                325                 330                 335
Glu Gly Pro Pro Ala Gly Thr Val His Pro Leu Ser Ala Pro Tyr Pro
            340                 345                 350
Pro Leu Asp Thr Pro Glu Thr Ala Thr Gly Ser Phe Leu Phe Gln Gly
        355                 360                 365
Glu Pro Glu Gly Gly Glu Gly Asp Gln Pro Leu Ser Gly Tyr Pro Trp
    370                 375                 380
Phe His Gly Met Leu Ser Arg Leu Lys Ala Ala Gln Leu Val Leu Thr
385                 390                 395                 400
Gly Gly Thr Gly Ser His Gly Val Phe Leu Val Arg Gln Ser Glu Thr
                405                 410                 415
Arg Arg Gly Glu Tyr Val Leu Thr Phe Asn Phe Gln Gly Lys Ala Lys
            420                 425                 430
His Leu Arg Leu Ser Leu Asn Glu Glu Gly Gln Cys Arg Val Gln His
        435                 440                 445
```

```
Leu Trp Phe Gln Ser Ile Phe Asp Met Leu Glu His Phe Arg Val His
    450                 455                 460
Pro Ile Pro Leu Glu Ser Gly Gly Ser Ser Asp Val Val Leu Val Ser
465                 470                 475                 480
Tyr Val Pro Ser Ser Gln Arg Gln Gln Gly Glu Gln Ser Arg Ser Ala
                485                 490                 495
Gly Glu Glu Val Pro Val His Pro Arg Ser Glu Ala Gly Ser Arg Leu
            500                 505                 510
Gly Ala Met Arg Gly Cys Ala Arg Glu Met Asp Ala Thr Pro Asn Ala
        515                 520                 525
Ser Cys Thr Leu Met Pro Phe Gly Ala Ser Asp Cys Glu Pro Thr Thr
    530                 535                 540
Ser His Asp Pro Pro Gln Pro Pro Glu Pro Pro Ser Trp Thr Asp Pro
545                 550                 555                 560
Pro Gln Pro Gly Glu Glu Glu Ala Ser Arg Ala Pro Gly Ser Gly Gly
                565                 570                 575
Gln Gln Ala Ala Ala Ala Ala Lys Glu Arg Gln Glu Lys Glu Lys Ala
            580                 585                 590
Gly Gly Gly Gly Val Pro Glu Glu Leu Val Pro Val Val Xaa Leu Val
        595                 600                 605
Pro Val Gly Glu Leu Gly Glu Gly His Arg Pro Gln Ala Gln Glu Ala
    610                 615                 620
Gln Gly Arg Leu Gly Pro Gly Gly Asp Ala Gly Val Pro Pro Met Val
625                 630                 635                 640
Gln Leu Gln Gln Ser Pro Leu Gly Gly Asp Gly Glu Glu Gly Gly His
                645                 650                 655
Pro Arg Ala Ile Asn Asn Gln Tyr Ser Phe Val
            660                 665     667
```

<210> 1125
<211> 387
<212>Amino acid
<213> Homo sapiens

<400> 1125

```
Phe Arg Ala Pro Val Gly Thr Ala Ala Arg Ser Pro Gln Val Val Ile
  1               5                  10                  15
Arg Arg Leu Pro Pro Gly Leu Thr Lys Glu Gln Leu Glu Glu Gln Leu
            20                  25                  30
Arg Pro Leu Pro Ala His Asp Tyr Phe Glu Phe Phe Ala Ala Asp Leu
        35                  40                  45
Ser Leu Tyr Pro His Leu Tyr Ser Arg Ala Tyr Ile Asn Phe Arg Asn
    50                  55                  60
Pro Asp Asp Ile Leu Leu Phe Arg Asp Arg Phe Asp Gly Tyr Ile Phe
65                  70                  75                  80
Leu Asp Ser Lys Asp Pro Glu Tyr Lys Lys Phe Leu Glu Thr Tyr Cys
                85                  90                  95
Val Glu Glu Glu Lys Thr Ser Ala Asn Pro Glu Thr Leu Leu Gly Glu
            100                 105                 110
Met Glu Ala Lys Thr Arg Glu Leu Ile Ala Arg Arg Thr Thr Pro Leu
        115                 120                 125
Leu Glu Tyr Ile Lys Asn Arg Lys Leu Glu Lys Gln Arg Ile Arg Glu
    130                 135                 140
Glu Lys Arg Glu Glu Arg Arg Arg Arg Glu Leu Glu Lys Lys Arg Leu
145                 150                 155                 160
Arg Glu Glu Glu Lys Arg Arg Arg Arg Glu Glu Glu Arg Cys Lys Lys
                165                 170                 175
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile
            180                 185                 190
```

```
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys
        195                 200                 205
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu
    210                 215                 220
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser
225                 230                 235                 240
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His
                245                 250                 255
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr
            260                 265                 270
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg
        275                 280                 285
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly
    290                 295                 300
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu
305                 310                 315                 320
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala
                325                 330                 335
Pro Arg Lys Glu Arg Leu Ala Asn Lys Asp Arg Pro Ala Leu Gln Leu
            340                 345                 350
Tyr Asp Pro Gly Ala Arg Phe Arg Ala Arg Glu Cys Gly Gly Asn Arg
        355                 360                 365
Arg Ile Cys Lys Ala Glu Gly Ser Gly Thr Gly Pro Glu Lys Arg Glu
    370                 375                 380
Glu Ala Glu
385     387
```

<210> 1126
<211> 208
<212>Amino acid
<213> Homo sapiens

<400> 1126

```
Gly Val Trp Gly Val Cys Val Ser Gly Leu Leu Gln Val Gly Ser Gln
  1               5                  10                  15
Arg Ala Gln Ala Trp Arg Ala Trp Ser Pro Met Glu Thr Pro Leu Thr
            20                  25                  30
Gly Thr Phe Leu Trp Pro His Ile Pro Gln Gly Leu Phe Phe Asp Asp
        35                  40                  45
Ser Tyr Gly Phe Tyr Pro Gly Gln Val Leu Ile Gly Pro Ala Lys Ile
    50                  55                  60
Phe Ser Ser Val Gln Trp Leu Ser Gly Val Lys Pro Val Leu Ser Thr
65                  70                  75                  80
Lys Ser Lys Phe Arg Val Val Val Glu Glu Val Gln Val Val Glu Leu
                85                  90                  95
Lys Val Thr Trp Ile Thr Lys Ser Phe Cys Pro Gly Gly Thr Asp Ser
            100                 105                 110
Val Ser Pro Pro Pro Ser Val Ile Thr Gln Glu Asn Leu Gly Arg Val
        115                 120                 125
Lys Arg Leu Gly Cys Phe Asp His Ala Gln Arg His Ala Trp Gly Ala
    130                 135                 140
Leu Ser Val Cys Leu Pro Ser Gln Gly Arg Ala Ser Gln Asp Cys Leu
145                 150                 155                 160
Gly Met Ser Arg Lys Lys Leu Arg Pro Gly Gly Gly Leu Tyr Gly Gln
                165                 170                 175
Glu Gly Glu Ala Pro Val Glu Glu Ala Gly Cys Ala Asp His Val Met
            180                 185                 190
Leu Pro Arg His Pro Val Phe Pro Gly Pro Phe His Gly Arg Pro Arg
        195                 200                 205         208
```

<210> 1127
<211> 670
<212>Amino acid
<213> Homo sapiens

<400> 1127

```
Phe Arg Asp Ser Ser Pro Cys Ser Ala Phe Glu Phe His Cys Leu Ser
 1               5                  10                  15
Gly Glu Cys Ile His Ser Ser Trp Arg Cys Asp Gly Gly Pro Asp Cys
            20                  25                  30
Lys Asp Lys Ser Asp Glu Glu Asn Cys Ala Val Ala Thr Cys Arg Pro
        35                  40                  45
Asp Glu Phe Gln Cys Ser Asp Gly Asn Cys Ile His Gly Ser Arg Gln
    50                  55                  60
Cys Asp Arg Glu Tyr Asp Cys Lys Asp Met Ser Asp Glu Val Gly Cys
65                  70                  75                  80
Val Asn Val Thr Leu Cys Glu Gly Pro Asn Lys Phe Lys Cys His Ser
                85                  90                  95
Gly Glu Cys Ile Thr Leu Asp Lys Val Cys Asn Met Ala Arg Asp Cys
            100                 105                 110
Arg Asp Trp Ser Asp Glu Pro Ile Lys Glu Cys Gly Thr Asn Glu Cys
        115                 120                 125
Leu Asp Asn Asn Gly Gly Cys Ser His Val Cys Asn Asp Leu Lys Ile
    130                 135                 140
Gly Tyr Glu Cys Leu Cys Pro Asp Gly Phe Gln Leu Val Ala Gln Arg
145                 150                 155                 160
Arg Cys Glu Asp Ile Asp Glu Cys Gln Asp Pro Asp Thr Cys Ser Gln
                165                 170                 175
Leu Cys Val Asn Leu Glu Gly Gly Tyr Lys Cys Gln Cys Glu Glu Gly
            180                 185                 190
Phe Gln Leu Asp Pro His Thr Lys Ala Cys Lys Ala Val Gly Ser Ile
        195                 200                 205
Ala Tyr Leu Phe Phe Thr Asn Arg His Glu Val Arg Lys Met Thr Leu
    210                 215                 220
Asp Arg Ser Glu Tyr Thr Ser Leu Ile Pro Asn Leu Arg Asn Val Val
225                 230                 235                 240
Ala Leu Asp Thr Glu Val Ala Ser Asn Arg Ile Tyr Trp Ser Asp Leu
                245                 250                 255
Ser Gln Arg Met Ile Cys Ser Thr Gln Leu Asp Arg Ala His Gly Val
            260                 265                 270
Ser Ser Tyr Asp Thr Val Ile Ser Arg Asp Ile Gln Ala Pro Asp Gly
        275                 280                 285
Leu Ala Val Asp Trp Ile His Ser Asn Ile Tyr Trp Thr Asp Ser Val
    290                 295                 300
Leu Gly Thr Val Ser Val Ala Asp Thr Lys Gly Val Lys Arg Lys Thr
305                 310                 315                 320
Leu Phe Arg Glu Asn Gly Ser Lys Pro Arg Ala Ile Val Val Asp Pro
                325                 330                 335
Val His Gly Phe Met Tyr Trp Thr Asp Trp Gly Thr Pro Ala Lys Ile
            340                 345                 350
Lys Lys Gly Gly Leu Asn Gly Val Asp Ile Tyr Ser Leu Val Thr Glu
        355                 360                 365
Asn Ile Gln Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu Ser Gly Arg
    370                 375                 380
Leu Tyr Trp Val Asp Ser Lys Leu His Ser Ile Ser Ser Ile Asp Val
385                 390                 395                 400
```

```
Asn Gly Gly Asn Arg Lys Thr Ile Leu Glu Asp Glu Lys Arg Leu Ala
                405                 410                 415
His Pro Phe Ser Leu Ala Val Phe Glu Asp Lys Val Phe Trp Thr Asp
            420                 425                 430
Ile Ile Asn Glu Ala Ile Phe Ser Ala Asn Arg Leu Thr Gly Ser Asp
        435                 440                 445
Val Asn Leu Leu Ala Glu Asn Leu Leu Ser Pro Glu Asp Met Val Leu
    450                 455                 460
Phe His Asn Leu Thr Gln Pro Arg Gly Val Asn Trp Cys Glu Arg Thr
465                 470                 475                 480
Thr Leu Ser Asn Gly Gly Cys Gln Tyr Leu Cys Leu Pro Ala Pro Gln
                485                 490                 495
Ile Asn Pro His Ser Pro Lys Phe Thr Cys Ala Cys Pro Asp Gly Met
            500                 505                 510
Leu Leu Ala Arg Asp Met Arg Ser Cys Leu Thr Glu Gly Glu Ala Ala
        515                 520                 525
Val Ala Thr Gln Glu Thr Ser Thr Val Arg Leu Lys Val Ser Ser Thr
    530                 535                 540
Ala Val Arg Thr Gln His Thr Thr Thr Arg Pro Val Pro Asp Thr Ser
545                 550                 555                 560
Arg Leu Pro Gly Ala Thr Pro Gly Leu Thr Thr Val Glu Ile Val Thr
                565                 570                 575
Met Ser His Gln Ala Leu Gly Asp Val Ala Gly Arg Gly Asn Glu Lys
            580                 585                 590
Lys Pro Ser Ser Val Arg Ala Leu Ser Ile Val Leu Pro Ile Val Leu
        595                 600                 605
Leu Val Phe Leu Cys Leu Gly Val Phe Leu Leu Trp Lys Asn Trp Arg
    610                 615                 620
Leu Lys Asn Ile Asn Ser Ile Asn Phe Asp Asn Pro Val Tyr Gln Lys
625                 630                 635                 640
Thr Thr Glu Asp Glu Val His Ile Cys His Asn Gln Asp Gly Tyr Ser
                645                 650                 655
Tyr Pro Ser Arg Gln Met Val Ser Leu Glu Asp Asp Val Ala
            660                 665                 670
```

<210> 1128
<211> 383
<212>Amino acid
<213> Homo sapiens

<400> 1128

```
Arg Ile Pro Gly Leu Gly Pro Pro Gly Ser Pro Pro Pro Pro Pro His
  1               5                  10                  15
Val Arg Gly Met Pro Gly Cys Pro Cys Pro Gly Cys Gly Met Ala Gly
             20                  25                  30
Pro Arg Leu Leu Phe Leu Thr Ala Leu Ala Leu Glu Leu Leu Gly Arg
         35                  40                  45
Ala Gly Gly Ser Gln Pro Ala Leu Arg Ser Arg Gly Thr Ala Thr Ala
     50                  55                  60
Cys Arg Leu Asp Asn Lys Glu Ser Glu Ser Trp Gly Ala Leu Leu Ser
 65                  70                  75                  80
Gly Glu Arg Leu Asp Thr Trp Ile Cys Ser Leu Leu Gly Ser Leu Met
                 85                  90                  95
Val Gly Leu Ser Gly Val Phe Pro Leu Leu Val Ile Pro Leu Glu Met
            100                 105                 110
Gly Thr Met Leu Arg Ser Glu Ala Gly Ala Trp Arg Leu Lys Gln Leu
        115                 120                 125
Leu Ser Phe Ala Leu Gly Gly Leu Leu Gly Asn Val Phe Leu His Leu
    130                 135                 140
```

```
Leu Pro Glu Ala Trp Ala Tyr Thr Cys Ser Ala Ser Pro Gly Gly Glu
145                 150                 155                 160
Gly Gln Ser Leu Gln Gln Gln Gln Leu Gly Leu Trp Val Ile Ala
            165                 170                 175
Gly Ile Leu Thr Phe Leu Ala Leu Glu Lys Met Phe Leu Asp Ser Lys
        180                 185                 190
Glu Glu Gly Thr Ser Gln Ala Pro Asn Lys Asp Pro Thr Ala Ala Ala
    195                 200                 205
Ala Ala Leu Asn Gly Gly His Cys Leu Ala Gln Pro Ala Ala Glu Pro
210                 215                 220
Gly Leu Gly Ala Val Val Arg Ser Ile Lys Val Ser Gly Tyr Leu Asn
225                 230                 235                 240
Leu Leu Ala Asn Thr Ile Asp Asn Phe Thr His Gly Leu Ala Val Ala
                245                 250                 255
Ala Ser Phe Leu Val Ser Lys Lys Ile Gly Leu Leu Thr Thr Met Ala
            260                 265                 270
Ile Leu Leu His Glu Ile Pro His Glu Val Gly Asp Phe Ala Ile Leu
        275                 280                 285
Leu Arg Ala Gly Phe Asp Arg Trp Ser Ala Ala Lys Leu Gln Leu Ser
290                 295                 300
Thr Ala Leu Gly Gly Leu Leu Gly Ala Gly Phe Ala Ile Cys Thr Gln
305                 310                 315                 320
Ser Pro Lys Gly Val Glu Glu Thr Ala Ala Trp Val Leu Pro Phe Thr
                325                 330                 335
Ser Gly Gly Phe Leu Tyr Ile Ala Leu Val Asn Val Leu Pro Asp Leu
            340                 345                 350
Leu Glu Glu Glu Asp Pro Trp Arg Ser Leu Gln Gln Leu Leu Leu Leu
        355                 360                 365
Cys Ala Gly Ile Val Val Met Val Leu Phe Ser Leu Phe Val Asp
370                 375                 380         383
```

<210> 1129
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1129

```
Gly Lys Val Ser Ala Gly Gln Ala Gly Ala Asp Arg Thr Leu Arg Arg
  1               5                  10                  15
Ala Pro Glu Pro Arg Phe Ser Gln Glu Pro Thr Gly Asn Ser Ala Tyr
            20                  25                  30
Pro Gln Leu Arg Pro Phe Leu Asp Pro Gln Gly Arg Asp Leu Lys Pro
        35                  40                  45
Ser Ala Leu Val Pro Pro Thr Arg Ser His Thr Gly Arg Arg Pro Trp
    50                  55                  60
Leu His Thr Gln Pro Leu Pro Gly Pro Gln Gly Arg Ala Trp Gly Pro
65                  70                  75                  80
Thr Cys Thr Pro Ala Cys Val Asp Arg Val Leu Glu Ser Glu Glu Gly
                85                  90                  95
Arg Arg Glu Tyr Leu Ala Phe Pro Thr Ser Lys Ser Ser Gly Gln Lys
            100                 105                 110
Gly Arg Lys Glu Leu Leu Lys Gly Asn Gly Arg Arg Ile Asp Tyr Met
        115                 120                 125
Leu His Ala Glu Glu Gly Leu Cys Pro Asp Trp Lys Ala Glu Val Glu
    130                 135                 140
Glu Phe Ser Phe Ile Thr Gln Leu Ser Gly Leu Thr Asp His Leu Pro
145                 150                 155                 160
Val Ala Met Arg Leu Met Val Ser Ser Gly Glu Glu Glu Ala
                165                 170             174
```

<210> 1130
<211> 231
<212>Amino acid
<213> Homo sapiens

<400> 1130

```
Pro Cys Gly Gly Ile Arg Leu Ser Ala Ser Glu Ala Ala Thr Leu Phe
  1               5                  10                  15
Gly Tyr Leu Val Val Pro Ala Gly Gly Gly Gly Thr Phe Leu Gly Gly
             20                  25                  30
Phe Phe Val Asn Lys Leu Arg Leu Arg Gly Ser Ala Val Ile Lys Phe
         35                  40                  45
Cys Leu Phe Cys Thr Val Val Ser Leu Leu Gly Ile Leu Val Phe Ser
     50                  55                  60
Leu His Cys Pro Ser Val Pro Met Ala Gly Val Thr Ala Ser Tyr Gly
 65                  70                  75                  80
Gly Ser Leu Leu Pro Glu Gly His Leu Asn Leu Thr Ala Pro Cys Asn
                 85                  90                  95
Ala Ala Cys Ser Cys Gln Pro Glu His Tyr Ser Pro Val Cys Gly Ser
            100                 105                 110
Asp Gly Leu Met Tyr Phe Ser Leu Cys His Ala Gly Cys Pro Ala Ala
        115                 120                 125
Thr Glu Thr Asn Val Asp Gly Gln Lys Val Ser Gly Ala Ala Ala Tyr
    130                 135                 140
Arg Pro Cys Pro Pro Leu Asp Pro Gly Lys Gly Pro Pro Cys Leu Pro
145                 150                 155                 160
Leu Val Ile Gly Ala Ile Val Gly Leu Pro Arg Cys Thr Glu Thr Val
                165                 170                 175
Ala Val Ser Leu Arg Ile Phe Pro Leu Val Leu Ala Met His Cys Arg
            180                 185                 190
Glu Met His Phe Asn Leu Ser Glu Lys Ala Pro Pro Ser Gly Phe His
        195                 200                 205
Ile Arg Cys Asn Phe Leu Tyr Ile Pro Gln Gln His Ser Cys Thr Asn
    210                 215                 220
Gly Asn Ser Thr Met Cys Pro
225                 230 231
```

<210> 1131
<211> 234
<212>Amino acid
<213> Homo sapiens

<400> 1131

```
Leu Leu Arg Lys Val Gly Ala Pro Gly Gly Ala Arg Gly Val Ile Arg
  1               5                  10                  15
Leu Leu Asp Trp Phe Glu Arg Pro Asp Gly Phe Leu Leu Val Leu Glu
             20                  25                  30
Arg Pro Glu Pro Ala Gln Asp Leu Phe Asp Phe Ile Thr Glu Arg Gly
         35                  40                  45
Ala Leu Asp Glu Pro Leu Ala Arg Arg Phe Phe Ala Gln Val Leu Ala
     50                  55                  60
Ala Val Arg His Cys His Ser Cys Gly Val Val His Arg Asp Ile Lys
 65                  70                  75                  80
```

```
Asp Glu Asn Leu Leu Val Asp Leu Arg Ser Gly Glu Leu Lys Leu Ile
                 85                  90                  95
Asp Phe Gly Ser Gly Ala Leu Leu Lys Asp Thr Val Tyr Thr Asp Phe
            100                 105                 110
Asp Gly Thr Arg Val Tyr Ser Pro Pro Glu Trp Ile Arg Tyr His Arg
        115                 120                 125
Tyr His Gly Arg Ser Ala Thr Val Trp Ser Leu Gly Val Leu Leu Tyr
    130                 135                 140
Asp Met Val Cys Gly Asp Ile Pro Phe Glu Gln Asp Glu Glu Ile Leu
145                 150                 155                 160
Arg Gly Arg Leu Leu Phe Arg Arg Arg Val Ser Pro Glu Cys Gln Gln
                165                 170                 175
Leu Ile Arg Trp Cys Leu Ser Leu Arg Pro Ser Glu Arg Pro Ser Leu
            180                 185                 190
Asp Gln Ile Ala Ala His Pro Trp Met Leu Gly Ala Asp Gly Gly Ala
        195                 200                 205
Pro Glu Ser Cys Asp Leu Arg Leu Cys Thr Leu Asp Pro Asp Asp Val
    210                 215                 220
Ala Ser Thr Thr Ser Ser Ser Glu Ser Leu
225                 230             234
```

<210> 1132
<211> 270
<212>Amino acid
<213> Homo sapiens

<400> 1132

```
Gly Lys Asn Ser Gln Lys Ala Ser Pro Val Asp Asp Glu Gln Leu Ser
  1                 5                  10                  15
Val Cys Leu Ser Gly Phe Leu Asp Glu Val Met Lys Lys Tyr Gly Ser
             20                  25                  30
Leu Val Pro Leu Ser Glu Lys Glu Val Leu Gly Arg Leu Lys Asp Val
         35                  40                  45
Phe Asn Glu Asp Phe Ser Asn Arg Lys Pro Phe Ile Asn Arg Glu Ile
     50                  55                  60
Thr Asn Tyr Arg Ala Arg His Gln Lys Cys Asn Phe Arg Ile Phe Tyr
 65                  70                  75                  80
Asn Lys His Met Leu Asp Met Asp Asp Leu Ala Thr Leu Asp Gly Gln
                 85                  90                  95
Asn Trp Leu Asn Asp Gln Val Ile Asn Met Tyr Gly Glu Leu Ile Met
            100                 105                 110
Asp Ala Val Pro Asp Lys Val His Phe Phe Asn Ser Phe Phe His Arg
        115                 120                 125
Gln Leu Val Thr Lys Gly Tyr Asn Gly Val Lys Arg Trp Thr Lys Lys
    130                 135                 140
Val Asp Leu Phe Lys Lys Ser Leu Leu Leu Ile Pro Ile His Leu Glu
145                 150                 155                 160
Val His Trp Ser Leu Ile Thr Val Thr Leu Ser Asn Arg Ile Ile Ser
                165                 170                 175
Phe Tyr Asp Ser Gln Gly Ile His Phe Lys Phe Cys Val Glu Asn Ile
            180                 185                 190
Arg Lys Tyr Leu Leu Thr Glu Ala Arg Glu Lys Asn Arg Leu Asn Leu
        195                 200                 205
Gln Gly Trp Gln Thr Ala Val Thr Lys Cys Ile Pro Gln Gln Lys Asn
    210                 215                 220
Asp Ser Asp Cys Gly Val Phe Val Leu Gln Tyr Cys Lys Cys Leu Ala
225                 230                 235                 240
Leu Lys Gln Pro Phe Gln Phe Ser Gln Glu Asp Met Pro Arg Val Arg
                245                 250                 255
```

```
Lys Arg Ile Tyr Lys Glu Leu Cys Glu Cys Arg Leu Met Asp
            260                 265                 270


     <210> 1133
     <211> 204
     <212>Amino acid
     <213> Homo sapiens

     <220>
     <221> misc_feature
     <222> (1)...(204)
     <223> X = any amino acid or stop code



     <400> 1133
Pro Pro Gly Gly Xaa Gln Gly Ser Ala Ala Lys His Arg Phe Pro Lys
  1               5                  10                  15
Gly Tyr Arg His Pro Ala Leu Glu Ala Arg Leu Gly Arg Arg Arg Thr
             20                  25                  30
Val Gln Glu Ala Arg Ala Leu Leu Arg Cys Arg Arg Ala Gly Ile Ser
         35                  40                  45
Ala Pro Val Val Phe Phe Val Asp Tyr Ala Ser Asn Cys Leu Tyr Met
     50                  55                  60
Glu Glu Ile Glu Gly Ser Val Thr Val Arg Asp Tyr Ile Gln Ser Thr
 65                  70                  75                  80
Met Glu Thr Glu Lys Thr Pro Gln Gly Leu Ser Asn Leu Ala Lys Thr
                 85                  90                  95
Ile Gly Gln Val Leu Ala Arg Met His Asp Glu Asp Leu Ile His Gly
            100                 105                 110
Asp Leu Thr Thr Ser Asn Met Leu Leu Lys Pro Pro Leu Glu Gln Leu
        115                 120                 125
Asn Ile Val Leu Ile Asp Phe Gly Leu Ser Phe Ile Ser Ala Leu Pro
    130                 135                 140
Glu Asp Lys Gly Val Asp Leu Tyr Val Leu Glu Lys Ala Phe Leu Ser
145                 150                 155                 160
Thr His Pro Asn Thr Glu Thr Val Phe Glu Ala Phe Leu Lys Ser Tyr
                165                 170                 175
Ser Thr Ser Ser Lys Lys Ala Arg Pro Val Leu Lys Lys Leu Asp Glu
            180                 185                 190
Val Arg Leu Arg Gly Lys Lys Arg Ser Met Val Gly
        195                 200                 204


     <210> 1134
     <211> 531
     <212>Amino acid
     <213> Homo sapiens



     <400> 1134
Arg Ala Cys Val Phe Arg Pro Glu Asp Met Met Gln Gly Glu Ala His
  1               5                  10                  15
Pro Ser Ala Ser Leu Ile Asp Arg Thr Ile Lys Met Arg Lys Glu Thr
             20                  25                  30
Glu Ala Arg Lys Val Val Leu Ala Trp Gly Leu Leu Asn Val Ser Met
         35                  40                  45
Ala Gly Met Ile Tyr Thr Glu Met Thr Gly Lys Leu Ile Ser Ser Tyr
```

```
     50                  55                  60
Tyr Asn Val Thr Tyr Trp Pro Leu Trp Tyr Ile Glu Leu Ala Leu Ala
 65                  70                  75                  80
Ser Leu Phe Ser Leu Asn Ala Leu Phe Asp Phe Trp Arg Tyr Phe Lys
                 85                  90                  95
Tyr Thr Val Ala Pro Thr Ser Leu Val Val Ser Pro Gly Gln Gln Thr
            100                 105                 110
Leu Leu Gly Leu Lys Thr Ala Val Val Gln Thr Thr Pro Pro His Asp
        115                 120                 125
Leu Ala Ala Thr Gln Ile Pro Pro Ala Pro Pro Ser Pro Ser Ile Gln
    130                 135                 140
Gly Gln Ser Val Leu Ser Tyr Ser Pro Ser Arg Ser Pro Ser Thr Ser
145                 150                 155                 160
Pro Lys Phe Thr Thr Ser Cys Met Thr Gly Tyr Ser Pro Gln Leu Gln
                165                 170                 175
Gly Leu Ser Ser Gly Gly Ser Gly Ser Tyr Ser Pro Gly Val Thr Tyr
            180                 185                 190
Ser Pro Val Ser Gly Tyr Asn Lys Leu Ala Ser Phe Ser Pro Ser Pro
        195                 200                 205
Pro Ser Pro Tyr Pro Thr Thr Val Gly Pro Val Glu Ser Ser Gly Leu
    210                 215                 220
Arg Ser Arg Tyr Arg Ser Ser Pro Thr Val Tyr Asn Ser Pro Thr Asp
225                 230                 235                 240
Lys Glu Asp Tyr Met Thr Asp Leu Arg Thr Leu Asp Thr Phe Leu Arg
                245                 250                 255
Ser Glu Glu Glu Lys Gln His Arg Val Lys Leu Gly Ser Pro Asp Ser
            260                 265                 270
Thr Ser Pro Ser Ser Ser Pro Thr Phe Trp Asn Tyr Ser Arg Ser Met
        275                 280                 285
Gly Asp Tyr Ala Gln Thr Leu Lys Lys Phe Gln Tyr Gln Leu Ala Cys
    290                 295                 300
Arg Ser Gln Ala Pro Cys Ala Asn Lys Asp Glu Ala Asp Leu Ser Ser
305                 310                 315                 320
Lys Gln Ala Ala Glu Glu Val Trp Ala Arg Val Ala Met Asn Arg Gln
                325                 330                 335
Leu Leu Asp His Met Asp Ser Trp Thr Ala Lys Phe Arg Asn Trp Ile
            340                 345                 350
Asn Glu Thr Ile Leu Val Pro Leu Val Gln Glu Ile Glu Ser Val Ser
        355                 360                 365
Thr Gln Met Arg Arg Met Gly Cys Pro Glu Leu Gln Ile Gly Glu Ala
    370                 375                 380
Ser Ile Thr Ser Leu Lys Gln Ala Ala Leu Val Lys Ala Pro Leu Ile
385                 390                 395                 400
Pro Thr Leu Asn Thr Ile Val Gln Tyr Leu Asp Leu Thr Pro Asn Gln
                405                 410                 415
Glu Tyr Leu Phe Glu Arg Ile Lys Glu Leu Ser Gln Gly Gly Cys Met
            420                 425                 430
Ser Ser Phe Arg Trp Asn Arg Gly Gly Asp Phe Lys Gly Arg Lys Trp
        435                 440                 445
Asp Thr Asp Leu Pro Thr Asp Ser Ala Ile Ile Met His Val Phe Cys
    450                 455                 460
Thr Tyr Leu Asp Ser Arg Leu Pro Pro His Pro Lys Tyr Pro Asp Gly
465                 470                 475                 480
Lys Thr Phe Thr Ser Gln His Phe Val Gln Thr Pro Asn Lys Pro Asp
                485                 490                 495
Val Thr Asn Glu Asn Val Phe Cys Ile Tyr Gln Ser Ala Ile Asn Pro
            500                 505                 510
Pro His Tyr Glu Leu Ile Tyr Gln Arg His Val Tyr Ile Pro Ala Lys
        515                 520                 525
Gly Gln Lys
    530 531
```

<210> 1135

<211> 508
<212>Amino acid
<213> Homo sapiens

<400> 1135

```
Ser Ser Ala Val Glu Phe Ile Asn Arg Asn Asn Ser Val Val Gln Val
 1               5                  10                  15
Leu Leu Ala Ala Gly Ala Asp Pro Asn Leu Gly Asp Asp Phe Ser Ser
            20                  25                  30
Val Tyr Lys Thr Ala Lys Glu Gln Gly Ile His Ser Leu Glu Val Leu
        35                  40                  45
Ile Thr Arg Glu Asp Asp Phe Asn Asn Arg Leu Asn Asn Arg Ala Ser
    50                  55                  60
Phe Lys Gly Cys Thr Ala Leu His Tyr Ala Val Leu Ala Asp Asp Tyr
65                  70                  75                  80
Arg Thr Val Lys Glu Leu Leu Asp Gly Gly Ala Asn Pro Leu Gln Arg
                85                  90                  95
Asn Glu Met Gly His Thr Pro Leu Asp Tyr Ala Arg Glu Gly Glu Val
            100                 105                 110
Met Lys Leu Leu Arg Thr Ser Glu Ala Lys Tyr Gln Glu Lys Gln Arg
        115                 120                 125
Lys Arg Glu Ala Glu Glu Arg Arg Arg Phe Pro Leu Glu Gln Arg Leu
    130                 135                 140
Lys Glu His Ile Ile Gly Gln Glu Ser Ala Ile Ala Thr Val Gly Ala
145                 150                 155                 160
Ala Ile Arg Arg Lys Glu Asn Gly Trp Tyr Asp Glu Glu His Pro Leu
                165                 170                 175
Val Phe Leu Phe Leu Gly Ser Ser Gly Ile Gly Lys Thr Glu Leu Ala
            180                 185                 190
Lys Gln Thr Ala Lys Tyr Met His Lys Asp Ala Lys Lys Gly Phe Ile
        195                 200                 205
Arg Leu Asp Met Ser Glu Phe Gln Glu Arg His Glu Val Ala Lys Phe
    210                 215                 220
Ile Gly Ser Pro Pro Gly Tyr Val Gly His Glu Glu Gly Gly Gln Leu
225                 230                 235                 240
Thr Lys Lys Leu Lys Gln Cys Pro Asn Ala Val Val Leu Phe Asp Glu
                245                 250                 255
Val Asp Lys Ala His Pro Asp Val Leu Thr Ile Met Leu Gln Leu Phe
            260                 265                 270
Asp Glu Gly Arg Leu Thr Asp Gly Lys Gly Lys Thr Ile Asp Cys Lys
        275                 280                 285
Asp Ala Ile Phe Ile Met Thr Ser Asn Val Ala Ser Asp Glu Ile Ala
    290                 295                 300
Gln His Ala Leu Gln Leu Arg Gln Glu Ala Leu Glu Met Ser Arg Asn
305                 310                 315                 320
Arg Ile Ala Glu Asn Leu Gly Asp Val Gln Ile Ser Asp Lys Ile Thr
                325                 330                 335
Ile Ser Lys Asn Phe Lys Glu Asn Val Ile Arg Pro Ile Leu Lys Ala
            340                 345                 350
His Phe Arg Arg Asp Glu Phe Leu Gly Arg Ile Asn Glu Ile Val Tyr
        355                 360                 365
Phe Leu Pro Phe Cys His Ser Glu Leu Ile Gln Leu Val Asn Lys Glu
    370                 375                 380
Leu Asn Phe Trp Ala Lys Arg Ala Lys Gln Arg His Asn Ile Thr Leu
385                 390                 395                 400
Leu Trp Asp Arg Glu Val Ala Asp Val Leu Val Asp Gly Tyr Asn Val
                405                 410                 415
His Tyr Gly Ala Arg Ser Ile Lys His Glu Val Glu Arg Arg Val Gly
            420                 425                 430
Asn Gln Leu Ala Ala Ala Tyr Glu Gln Asp Leu Leu Pro Gly Gly Cys
```

```
        435                 440                 445
Thr Leu Arg Ile Thr Val Glu Asp Ser Asp Lys Gln Leu Leu Lys Ser
    450                 455                 460
Pro Glu Leu Pro Ser Pro Gln Ala Glu Lys Arg Leu Pro Lys Leu Arg
465                 470                 475                 480
Leu Glu Ile Ile Asp Lys Asp Ser Lys Thr Arg Arg Leu Asp Ile Arg
                485                 490                 495
Ala Pro Leu His Pro Glu Lys Val Cys Asn Thr Ile
            500                 505         508
```

<210> 1136
<211> 81
<212>Amino acid
<213> Homo sapiens

<400> 1136

```
Ser Ser Cys Asp Arg Glu Arg His Gly Ser Leu Gly Met Met Ser Gly
  1               5                  10                  15
Ser Phe Ile Leu Cys Leu Ala Leu Val Thr Arg Trp Ser Pro Gln Ala
            20                  25                  30
Ser Ser Val Pro Leu Ala Val Tyr Glu Ser Lys Thr Arg Lys Ser Tyr
        35                  40                  45
Arg Ser Gln Arg Asp Arg Asp Gly Lys Asp Arg Ser Gln Gly Met Gly
    50                  55                  60
Leu Ser Leu Leu Val Glu Thr Arg Lys Leu Leu Leu Ser Ala Asn Gln
65                  70                  75                  80
Gly
 81
```

<210> 1137
<211> 260
<212>Amino acid
<213> Homo sapiens

<400> 1137

```
His Thr Pro Met Ala Phe Phe Leu Ser Phe Leu Ser Thr Ser Glu Thr
  1               5                  10                  15
Val Tyr Thr Phe Val Ile Leu Pro Lys Met Leu Ile Asn Leu Leu Ser
            20                  25                  30
Val Ala Arg Thr Ile Ser Phe Asn Cys Cys Ala Leu Gln Met Phe Phe
        35                  40                  45
Phe Leu Gly Phe Ala Ile Thr Asn Cys Leu Leu Leu Gly Val Met Gly
    50                  55                  60
Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro Leu His Tyr Pro Thr Leu
65                  70                  75                  80
Met Ser Trp Gln Val Cys Gly Lys Leu Ala Ala Ala Cys Ala Ile Gly
                85                  90                  95
Gly Phe Leu Ala Ser Leu Thr Val Val Asn Leu Val Phe Ser Leu Pro
            100                 105                 110
Phe Cys Ser Thr Asn Lys Val Asn His Tyr Phe Cys Asp Ile Ser Ala
        115                 120                 125
Val Ile Leu Leu Ala Cys Thr Asn Thr Asp Val Asn Gly Phe Val Ile
    130                 135                 140
Phe Ile Cys Gly Val Leu Val Leu Val Val Pro Phe Leu Phe Ile Cys
```

```
145                 150                 155                 160
Val Ser Tyr Phe Cys Ile Leu Arg Thr Ile Leu Lys Ile Pro Ser Ala
                165                 170                 175
Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ser Val
            180                 185                 190
Val Ile Val His Tyr Gly Cys Ala Ser Phe Ile Tyr Leu Arg Pro Thr
        195                 200                 205
Ala Asn Tyr Val Ser Asn Lys Asp Arg Leu Val Thr Val Thr Tyr Thr
    210                 215                 220
Ile Val Thr Pro Leu Leu Asn Pro Met Val Tyr Ser Leu Arg Asn Lys
225                 230                 235                 240
Asp Val Gln Leu Ala Ile Arg Lys Val Leu Gly Lys Lys Gly Ser Leu
                245                 250                 255
Lys Leu Tyr Asn
            260
```

<210> 1138
<211> 393
<212>Amino acid
<213> Homo sapiens

<400> 1138

```
Arg Pro Pro Ala Ala Thr Arg Tyr Pro Arg Glu Lys Leu Lys Ser Met
  1               5                  10                  15
Thr Ser Arg Asp Asn Tyr Lys Ala Gly Ser Arg Glu Ala Ala Ala Ala
             20                  25                  30
Ala Ala Ala Ala Val Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Glu
         35                  40                  45
Pro Tyr Pro Val Ser Gly Ala Lys Arg Lys Tyr Leu Glu Asp Ser Asp
     50                  55                  60
Pro Glu Arg Ser Asp Tyr Glu Glu Gln Gln Leu Gln Glu Glu Glu Glu
 65                  70                  75                  80
Ala Arg Lys Val Lys Ser Gly Ile Arg Gln Met Arg Leu Phe Ser Gln
                 85                  90                  95
Asp Glu Cys Ala Lys Ile Glu Ala Arg Ile Asp Glu Val Val Ser Arg
            100                 105                 110
Ala Glu Lys Gly Leu Tyr Asn Glu His Thr Val Asp Arg Ala Pro Leu
        115                 120                 125
Arg Asn Lys Tyr Phe Phe Gly Glu Gly Tyr Thr Tyr Gly Ala Gln Leu
    130                 135                 140
Gln Lys Arg Gly Pro Gly Gln Glu Arg Leu Tyr Pro Pro Gly Asp Val
145                 150                 155                 160
Asp Glu Ile Pro Glu Trp Val His Gln Leu Val Ile Gln Lys Leu Val
                165                 170                 175
Glu His Arg Val Ile Pro Glu Gly Phe Val Asn Ser Ala Val Ile Asn
            180                 185                 190
Asp Tyr Gln Pro Gly Gly Cys Ile Val Ser His Val Asp Pro Ile His
        195                 200                 205
Ile Phe Glu Arg Pro Ile Val Ser Val Ser Phe Phe Ser Asp Ser Ala
    210                 215                 220
Leu Cys Phe Gly Cys Lys Phe Gln Phe Lys Pro Ile Arg Val Ser Glu
225                 230                 235                 240
Pro Val Leu Ser Leu Pro Val Arg Arg Gly Ser Val Thr Val Leu Ser
                245                 250                 255
Gly Tyr Ala Ala Asp Glu Ile Thr His Cys Ile Arg Pro Gln Asp Ile
            260                 265                 270
Lys Glu Arg Arg Ala Val Ile Ile Leu Arg Lys Thr Arg Leu Asp Ala
        275                 280                 285
Pro Arg Leu Glu Thr Lys Ser Leu Ser Ser Ser Val Leu Pro Pro Ser
```

```
    290                 295                 300
Tyr Ala Ser Asp Arg Leu Ser Gly Asn Asn Arg Asp Pro Ala Leu Lys
305                 310                 315                 320
Pro Lys Arg Ser His Arg Lys Ala Asp Pro Asp Ala Ala His Arg Pro
                325                 330                 335
Arg Ile Leu Glu Met Asp Lys Glu Glu Asn Arg Arg Ser Val Leu Leu
            340                 345                 350
Pro Thr His Arg Arg Arg Gly Ser Phe Ser Ser Glu Asn Tyr Trp Arg
        355                 360                 365
Lys Ser Tyr Glu Ser Ser Glu Asp Cys Ser Glu Ala Ala Gly Ser Pro
    370                 375                 380
Ala Arg Lys Val Lys Met Arg Arg His
385                 390         393
```

<210> 1139
<211> 545
<212>Amino acid
<213> Homo sapiens

<400> 1139

```
Val Thr Trp His Phe Tyr Phe Cys Ser Asp His Lys Asn Gly His Tyr
  1               5                  10                  15
Ile Ile Pro Gln Met Ala Asp Arg Ser Arg Gln Lys Cys Met Ser Gln
             20                  25                  30
Ser Leu Asp Leu Ser Glu Leu Ala Lys Ala Ala Lys Lys Lys Leu Gln
         35                  40                  45
Ala Leu Ser Asn Arg Leu Phe Glu Glu Leu Ala Met Asp Val Tyr Asp
     50                  55                  60
Glu Val Asp Arg Arg Glu Asn Asp Ala Val Trp Leu Ala Thr Gln Asn
 65                  70                  75                  80
His Ser Thr Leu Val Thr Glu Arg Ser Ala Val Pro Phe Leu Pro Val
                 85                  90                  95
Asn Pro Glu Tyr Ser Ala Thr Arg Asn Gln Gly Arg Gln Lys Leu Ala
            100                 105                 110
Arg Phe Asn Ala Arg Glu Phe Ala Thr Leu Ile Ile Asp Ile Leu Ser
        115                 120                 125
Glu Ala Lys Arg Arg Gln Gln Gly Lys Ser Leu Ser Ser Pro Thr Asp
    130                 135                 140
Asn Leu Glu Leu Ser Leu Arg Ser Gln Ser Asp Leu Asp Asp Gln His
145                 150                 155                 160
Asp Tyr Asp Ser Val Ala Ser Asp Glu Asp Thr Asp Gln Glu Pro Leu
                165                 170                 175
Arg Ser Thr Gly Ala Thr Arg Ser Asn Arg Ala Arg Ser Met Asp Ser
            180                 185                 190
Ser Asp Leu Ser Asp Gly Ala Val Thr Leu Gln Glu Tyr Leu Glu Leu
        195                 200                 205
Lys Lys Ala Leu Ala Thr Ser Glu Ala Lys Val Gln Gln Leu Met Lys
    210                 215                 220
Val Asn Ser Ser Leu Ser Asp Glu Leu Arg Arg Leu Gln Arg Glu His
225                 230                 235                 240
Phe Ala Pro Ile Ile His Lys Leu Gln Ala Glu Asn Leu Gln Leu Arg
                245                 250                 255
Gln Pro Pro Gly Pro Val Pro Thr Pro Pro Leu Pro Ser Glu Arg Ala
            260                 265                 270
Glu His Thr Pro Met Ala Pro Gly Gly Ser Thr His Arg Arg Asp Arg
        275                 280                 285
Gln Ala Phe Ser Met Tyr Glu Pro Gly Ser Ala Leu Lys Pro Phe Gly
    290                 295                 300
Gly Pro Pro Gly Asp Glu Leu Thr Thr Arg Leu Gln Pro Phe His Ser
```

```
305                 310                 315                 320
Thr Glu Leu Glu Asp Asp Ala Ile Tyr Ser Val His Val Pro Ala Gly
                325                 330                 335
Leu Tyr Arg Ile Arg Lys Gly Val Ser Ala Ser Ala Val Pro Phe Thr
            340                 345                 350
Pro Ser Ser Pro Leu Leu Ser Cys Ser Gln Glu Gly Ser Arg His Thr
        355                 360                 365
Ser Lys Leu Ser Arg His Gly Ser Gly Ala Asp Ser Asp Tyr Glu Asn
    370                 375                 380
Thr Gln Ser Gly Asp Pro Leu Leu Gly Leu Glu Gly Lys Arg Phe Leu
385                 390                 395                 400
Glu Leu Gly Lys Glu Glu Asp Phe His Pro Glu Leu Glu Ser Leu Asp
                405                 410                 415
Gly Asp Leu Asp Pro Gly Leu Pro Ser Thr Glu Asp Val Ile Leu Lys
            420                 425                 430
Thr Glu Gln Val Thr Lys Asn Ile Gln Glu Leu Leu Arg Ala Ala Gln
        435                 440                 445
Glu Phe Lys His Asp Ser Phe Val Pro Cys Ser Glu Lys Ile His Leu
    450                 455                 460
Ala Val Thr Glu Met Ala Ser Leu Phe Pro Lys Arg Pro Ala Leu Glu
465                 470                 475                 480
Pro Val Arg Ser Ser Leu Arg Leu Leu Asn Ala Ser Ala Tyr Arg Leu
                485                 490                 495
Gln Ser Glu Cys Arg Lys Thr Val Pro Pro Glu Pro Gly Ala Pro Val
            500                 505                 510
Asp Phe Gln Leu Leu Thr Gln Gln Val Ile Gln Cys Ala Tyr Asp Ile
        515                 520                 525
Ala Lys Ala Ala Lys Gln Leu Val Thr Ile Thr Thr Arg Glu Lys Lys
    530                 535                 540
Gln
545
```

<210> 1140
<211> 621
<212>Amino acid
<213> Homo sapiens

<400> 1140

```
Arg Tyr Leu Ser Tyr Gly Ser Gly Pro Lys Arg Phe Pro Leu Val Asp
  1               5                  10                  15
Val Leu Gln Tyr Ala Leu Glu Phe Ala Ser Ser Lys Pro Val Cys Thr
            20                  25                  30
Ser Pro Val Asp Asp Ile Asp Ala Ser Ser Pro Pro Ser Gly Ser Ile
        35                  40                  45
Pro Ser Gln Thr Leu Pro Ser Thr Thr Glu Gln Gln Gly Ala Leu Ser
    50                  55                  60
Ser Glu Leu Pro Ser Thr Ser Pro Ser Ser Val Ala Ala Ile Ser Ser
65                  70                  75                  80
Arg Ser Val Ile His Lys Pro Phe Thr Gln Ser Arg Ile Pro Pro Asp
                85                  90                  95
Leu Pro Met His Pro Ala Pro Arg His Ile Thr Glu Glu Glu Leu Ser
            100                 105                 110
Val Leu Glu Ser Cys Leu His Arg Trp Arg Thr Glu Ile Glu Asn Asp
        115                 120                 125
Thr Arg Asp Leu Gln Glu Ser Ile Ser Arg Ile His Arg Thr Ile Glu
    130                 135                 140
Leu Met Tyr Ser Asp Lys Ser Met Ile Gln Val Pro Tyr Arg Leu His
145                 150                 155                 160
Ala Val Leu Val His Glu Gly Gln Ala Asn Ala Gly His Tyr Trp Ala
```

```
                165                 170                 175
Tyr Ile Phe Asp His Arg Glu Ser Arg Trp Met Lys Tyr Asn Asp Ile
            180                 185                 190
Ala Val Thr Lys Ser Ser Trp Glu Glu Leu Val Arg Asp Ser Phe Gly
        195                 200                 205
Gly Tyr Arg Asn Ala Ser Ala Tyr Cys Leu Met Tyr Ile Asn Asp Lys
    210                 215                 220
Ala Gln Phe Leu Ile Gln Glu Glu Phe Asn Lys Glu Thr Gly Gln Pro
225                 230                 235                 240
Leu Val Gly Ile Glu Thr Leu Pro Pro Asp Leu Arg Asp Phe Val Glu
                245                 250                 255
Glu Asp Asn Gln Arg Phe Glu Lys Glu Leu Glu Glu Trp Asp Ala Gln
            260                 265                 270
Leu Ala Gln Lys Ala Leu Gln Glu Lys Leu Leu Ala Ser Gln Lys Leu
        275                 280                 285
Arg Glu Ser Glu Thr Ser Val Thr Thr Ala Gln Ala Ala Gly Asp Pro
    290                 295                 300
Lys Tyr Leu Glu Gln Pro Ser Arg Ser Asp Phe Ser Lys His Leu Lys
305                 310                 315                 320
Glu Glu Thr Ile Gln Ile Ile Thr Lys Ala Ser His Glu His Glu Asp
                325                 330                 335
Lys Ser Pro Glu Thr Val Leu Gln Ser Ala Ile Lys Leu Glu Tyr Ala
            340                 345                 350
Arg Leu Val Lys Leu Ala Gln Glu Asp Thr Pro Pro Glu Thr Asp Tyr
        355                 360                 365
Arg Leu His His Val Val Val Tyr Phe Ile Gln Asn Gln Ala Pro Lys
    370                 375                 380
Lys Ile Ile Glu Lys Thr Leu Leu Glu Gln Phe Gly Asp Arg Asn Leu
385                 390                 395                 400
Ser Phe Asp Glu Arg Cys His Asn Ile Met Lys Val Ala Gln Ala Lys
                405                 410                 415
Leu Glu Met Ile Lys Pro Glu Glu Val Asn Leu Glu Glu Tyr Glu Glu
            420                 425                 430
Trp His Gln Asp Tyr Arg Lys Phe Arg Glu Thr Thr Met Tyr Leu Ile
        435                 440                 445
Ile Gly Leu Glu Asn Phe Gln Arg Glu Ser Tyr Ile Asp Ser Leu Leu
    450                 455                 460
Phe Leu Ile Cys Ala Tyr Gln Asn Asn Lys Glu Leu Leu Ser Lys Gly
465                 470                 475                 480
Leu Tyr Arg Gly His Asp Glu Glu Leu Ile Ser His Tyr Arg Arg Glu
                485                 490                 495
Cys Leu Leu Lys Leu Asn Glu Gln Ala Ala Glu Leu Phe Glu Ser Gly
            500                 505                 510
Glu Asp Arg Glu Val Asn Asn Gly Leu Ile Ile Met Asn Glu Phe Ile
        515                 520                 525
Val Pro Phe Leu Pro Leu Leu Leu Val Asp Glu Met Glu Glu Lys Asp
    530                 535                 540
Ile Leu Ala Val Glu Asp Met Arg Asn Arg Trp Cys Ser Tyr Leu Gly
545                 550                 555                 560
Gln Glu Met Glu Pro His Leu Gln Glu Lys Leu Thr Asp Phe Leu Pro
                565                 570                 575
Lys Leu Leu Asp Cys Ser Met Glu Ile Lys Ser Phe His Glu Pro Pro
            580                 585                 590
Lys Leu Pro Ser Tyr Ser Thr His Glu Leu Cys Glu Arg Phe Ala Arg
        595                 600                 605
Ile Met Leu Ser Leu Ser Arg Thr Pro Ala Asp Gly Arg
    610                 615                 620 621
```

<210> 1141
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 1141

```
Ala Gln Val Tyr Val Arg Met Asp Ser Phe Asp Glu Asp Leu Ala Arg
 1               5                  10                  15
Pro Ser Gly Leu Leu Ala Gln Glu Arg Lys Leu Cys Arg Asp Leu Val
            20                  25                  30
His Ser Asn Lys Lys Glu Gln Glu Phe Arg Ser Ile Phe Gln His Ile
        35                  40                  45
Gln Ser Ala Gln Ser Gln Arg Ser Pro Ser Glu Leu Phe Ala Gln His
    50                  55                  60
Met Val Pro Ile Val His His Val Lys Glu His His Phe Gly Ser Ser
65                  70                  75                  80
Gly Met Thr Leu His Glu Arg Phe Thr Lys Tyr Leu Lys Arg Gly Thr
                85                  90                  95
Glu Gln Glu Ala Ala Lys Asn Lys Lys Ser Pro Glu Ile His Arg Arg
            100                 105                 110
Ile Asp Ile Ser Pro Ser Thr Phe Arg Lys His Gly Leu Ala His Asp
        115                 120                 125
Glu Met Lys Ser Pro Arg Glu Pro Gly Tyr Lys Asp Gly His Asn Ser
    130                 135                 140
Lys Asn Glu Leu Gln Arg Val Asn Phe Tyr
145                 150             154
```

<210> 1142
<211> 121
<212>Amino acid
<213> Homo sapiens

<400> 1142

```
Thr Tyr Thr Phe Cys Phe Ser Leu Met Ile Ile Leu Leu Thr Ile Ile
 1               5                  10                  15
Gln Gly Leu Ile Leu Glu Ala Phe Gly Glu Leu Arg Asp Gln Leu Asp
            20                  25                  30
Gln Val Lys Glu Asp Met Glu Thr Lys Cys Phe Ile Cys Gly Ile Gly
        35                  40                  45
Asn Asp Tyr Phe Asp Thr Val Pro His Gly Phe Glu Thr His Thr Leu
    50                  55                  60
Gln Glu His Asn Leu Ala Asn Tyr Leu Phe Phe Leu Met Tyr Leu Ile
65                  70                  75                  80
Asn Lys Asp Glu Thr Glu His Thr Gly Gln Glu Ser Tyr Val Trp Lys
                85                  90                  95
Met Tyr Gln Glu Arg Cys Trp Glu Phe Phe Pro Ala Gly Asp Cys Phe
            100                 105                 110
Arg Lys Gln Tyr Glu Asp Gln Leu Asn
        115                 120 121
```

<210> 1143
<211> 851
<212>Amino acid
<213> Homo sapiens

<400> 1143

```
Phe Arg Arg Lys Gly Gly Gly Gly Pro Lys Asp Phe Gly Ala Gly Leu
 1               5                  10                  15
Lys Tyr Asn Ser Arg His Glu Lys Val Asn Gly Leu Glu Glu Gly Val
            20                  25                  30
Glu Phe Leu Pro Val Asn Asn Val Lys Lys Val Glu Lys His Gly Pro
        35                  40                  45
Gly Arg Trp Val Val Leu Ala Ala Val Leu Ile Gly Leu Leu Leu Val
    50                  55                  60
Leu Leu Gly Ile Gly Phe Leu Val Trp His Leu Gln Tyr Arg Asp Val
65                  70                  75                  80
Arg Val Gln Lys Val Phe Asn Gly Tyr Met Arg Ile Thr Asn Glu Asn
                85                  90                  95
Phe Val Asp Ala Tyr Glu Asn Ser Asn Ser Thr Glu Phe Val Ser Leu
            100                 105                 110
Ala Ser Lys Val Lys Asp Ala Leu Lys Leu Leu Tyr Ser Gly Val Pro
        115                 120                 125
Phe Leu Gly Pro Tyr His Lys Glu Ser Ala Val Thr Ala Phe Ser Glu
    130                 135                 140
Gly Ser Val Ile Ala Tyr Tyr Trp Ser Glu Phe Ser Ile Pro Gln His
145                 150                 155                 160
Leu Val Glu Glu Ala Glu Arg Val Met Ala Glu Glu Arg Val Val Met
                165                 170                 175
Leu Pro Pro Arg Ala Arg Ser Leu Lys Ser Phe Val Val Thr Ser Val
            180                 185                 190
Val Ala Phe Pro Thr Asp Ser Lys Thr Val Gln Arg Thr Gln Asp Asn
        195                 200                 205
Ser Cys Ser Phe Gly Leu His Ala Arg Gly Val Glu Leu Met Arg Phe
    210                 215                 220
Thr Thr Pro Gly Phe Pro Asp Ser Pro Tyr Pro Ala His Ala Arg Cys
225                 230                 235                 240
Gln Trp Ala Leu Arg Gly Asp Ala Asp Ser Val Leu Ser Leu Thr Phe
                245                 250                 255
Arg Ser Phe Asp Leu Ala Ser Cys Asp Glu Arg Gly Arg His Leu Val
            260                 265                 270
Thr Val Tyr Asn Thr Leu Ser Pro Met Glu Pro His Ala Leu Val Gln
        275                 280                 285
Leu Cys Gly Thr Tyr Pro Pro Ser Tyr Asn Leu Thr Phe His Ser Ser
    290                 295                 300
Gln Asn Val Leu Leu Ile Thr Leu Ile Thr Asn Thr Glu Arg Arg His
305                 310                 315                 320
Pro Gly Phe Glu Ala Thr Phe Phe Gln Leu Pro Arg Met Ser Ser Cys
                325                 330                 335
Gly Gly Arg Leu Arg Lys Ala Gln Gly Thr Phe Asn Ser Pro Tyr Tyr
            340                 345                 350
Pro Gly His Tyr Pro Pro Asn Ile Asp Cys Thr Trp Asn Ile Glu Val
        355                 360                 365
Pro Asn Asn Gln His Val Lys Val Arg Phe Lys Phe Phe Tyr Leu Leu
    370                 375                 380
Glu Pro Gly Val Pro Ala Gly Thr Cys Pro Lys Asp Tyr Val Glu Ile
385                 390                 395                 400
Asn Gly Glu Lys Tyr Cys Gly Glu Arg Ser Gln Phe Val Val Thr Ser
                405                 410                 415
Asn Ser Asn Lys Ile Thr Val Arg Phe His Ser Asp Gln Ser Tyr Thr
            420                 425                 430
Asp Thr Gly Phe Leu Ala Glu Tyr Leu Ser Tyr Asp Ser Ser Asp Pro
        435                 440                 445
Cys Pro Gly Gln Phe Thr Cys Arg Thr Gly Arg Cys Ile Arg Lys Glu
    450                 455                 460
Leu Arg Cys Asp Gly Trp Ala Asp Cys Thr Asp His Ser Asp Glu Leu
465                 470                 475                 480
Asn Cys Ser Cys Asp Ala Gly His Gln Phe Thr Cys Lys Asn Lys Phe
                485                 490                 495
Cys Lys Pro Leu Phe Trp Val Cys Asp Ser Leu Asn Asp Cys Gly Asp
```

```
            500                 505                 510
Asn Ser Asp Glu Gln Gly Cys Ser Cys Pro Ala Gln Thr Phe Arg Cys
        515                 520                 525
Ser Asn Gly Lys Cys Leu Ser Lys Ser Gln Gln Cys Asn Gly Lys Asp
    530                 535                 540
Asp Cys Gly Asp Gly Ser Asp Glu Ala Ser Cys Pro Lys Val Asn Val
545                 550                 555                 560
Val Thr Cys Thr Lys His Thr Tyr Arg Cys Leu Asn Gly Leu Cys Leu
                565                 570                 575
Ser Lys Gly Asn Pro Glu Cys Asp Gly Lys Glu Asp Cys Ser Asp Gly
            580                 585                 590
Ser Asp Glu Lys Asp Cys Asp Cys Gly Leu Arg Ser Phe Thr Arg Gln
        595                 600                 605
Ala Arg Val Val Gly Gly Thr Asp Ala Asp Glu Gly Glu Trp Pro Trp
    610                 615                 620
Gln Val Ser Leu His Ala Leu Gly Gln Gly His Ile Cys Gly Ala Ser
625                 630                 635                 640
Leu Ile Ser Pro Asn Trp Leu Val Ser Ala Ala His Cys Tyr Ile Asp
                645                 650                 655
Asp Arg Gly Phe Arg Tyr Ser Asp Pro Thr Gln Trp Thr Ala Phe Leu
            660                 665                 670
Gly Leu His Asp Gln Ser Gln Arg Ser Ala Pro Gly Val Gln Glu Arg
        675                 680                 685
Arg Leu Lys Arg Ile Ile Ser His Pro Phe Phe Asn Asp Phe Thr Phe
    690                 695                 700
Asp Tyr Asp Ile Ala Leu Leu Glu Leu Glu Lys Pro Ala Glu Tyr Ser
705                 710                 715                 720
Ser Met Val Arg Pro Ile Cys Leu Pro Asp Ala Ser His Val Phe Pro
                725                 730                 735
Ala Gly Lys Ala Ile Trp Val Thr Gly Trp Gly His Thr Gln Tyr Gly
            740                 745                 750
Gly Thr Gly Ala Leu Ile Leu Gln Lys Gly Glu Ile Arg Val Ile Asn
        755                 760                 765
Gln Thr Thr Cys Glu Asn Leu Leu Pro Gln Gln Ile Thr Pro Arg Met
    770                 775                 780
Met Cys Val Gly Phe Leu Ser Gly Gly Val Asp Ser Cys Gln Gly Asp
785                 790                 795                 800
Ser Gly Gly Pro Leu Ser Ser Val Glu Ala Asp Gly Arg Ile Phe Gln
                805                 810                 815
Ala Gly Val Val Ser Trp Gly Asp Gly Cys Ala Gln Arg Asn Lys Pro
            820                 825                 830
Gly Val Tyr Thr Arg Leu Pro Leu Phe Arg Asp Trp Ile Lys Glu Asn
        835                 840                 845
Thr Gly Val
    850 851
```

<210> 1144
<211> 346
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(346)
<223> X = any amino acid or stop code

<400> 1144

```
Arg His Glu Glu Asp Leu Gly Asn Leu Trp Glu Asn Thr Arg Phe Thr
  1               5                  10                  15
```

```
Asp Cys Ser Phe Phe Val Arg Gly Gln Glu Phe Lys Ala His Lys Ser
            20                  25                  30
Val Leu Ala Ala Arg Ser Pro Val Phe Asn Ala Met Phe Glu His Glu
        35                  40                  45
Met Glu Glu Ser Lys Lys Asn Arg Val Glu Ile Asn Asp Leu Asp Pro
    50                  55                  60
Glu Val Phe Lys Glu Met Met Arg Phe Ile Tyr Thr Gly Arg Ala Pro
65                  70                  75                  80
Asn Leu Asp Lys Met Ala Asp Asn Leu Leu Ala Ala Ala Asp Lys Tyr
                85                  90                  95
Ala Leu Glu Arg Leu Lys Val Met Cys Glu Lys Ala Leu Cys Ser Asn
            100                 105                 110
Leu Ser Val Glu Asn Val Ala Asp Thr Leu Val Leu Ala Asp Leu His
        115                 120                 125
Ser Ala Glu Gln Leu Lys Ala Gln Ala Ile Asp Phe Ile Asn Arg Cys
    130                 135                 140
Ser Val Leu Arg Gln Leu Gly Cys Lys Asp Gly Lys Asn Trp Asn Ser
145                 150                 155                 160
Asn Gln Ala Thr Asp Ile Met Glu Thr Ser Gly Gly Lys Ser Met Ile
                165                 170                 175
Gln Ser His Pro His Leu Val Ala Glu Ala Phe Arg Ala Leu Ala Ser
            180                 185                 190
Ala Gln Gly Pro Gln Phe Gly Ile Pro Arg Lys Arg Leu Lys Gln Ser
        195                 200                 205
Xaa Asn Leu Gly Asn Leu Trp Glu Asn Thr Arg Phe Thr Asp Cys Ser
    210                 215                 220
Phe Phe Val Arg Gly Gln Glu Phe Lys Ala His Lys Ser Val Leu Ala
225                 230                 235                 240
Ala Arg Ser Pro Val Phe Asn Ala Met Phe Glu His Glu Met Glu Glu
                245                 250                 255
Ser Lys Lys Asn Arg Val Glu Ile Asn Asp Leu Asp Pro Glu Val Phe
            260                 265                 270
Lys Glu Met Met Arg Phe Ile Tyr Thr Gly Arg Ala Pro Asn Leu Asp
        275                 280                 285
Lys Met Ala Asp Asn Leu Leu Ala Ala Ala Asp Lys Tyr Ala Leu Glu
    290                 295                 300
Arg Leu Lys Val Met Cys Glu Lys Ala Leu Cys Ser Asn Leu Ser Val
305                 310                 315                 320
Glu Asn Val Ala Asp Thr Leu Val Leu Ala Asp Leu His Ser Gly Arg
                325                 330                 335
Thr Val Glu Ser Thr Ser His Arg Leu Tyr
            340                 345 346
```

<210> 1145
<211> 339
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(339)
<223> X = any amino acid or stop code

<400> 1145

```
Gln Arg Gly Gly Ile Pro Gly Lys Phe Gln Glu Asp Ser Gly Ser Val
 1               5                  10                  15
Asp Trp Ala Leu Gly Pro Phe Trp Gly Ile Phe Gln Ala Asp Phe Gly
            20                  25                  30
Cys Met Arg Phe Tyr Leu Ser Ala Gln Thr Ser Asp Pro Val Leu Arg
```

```
         35                  40                  45
Met Xaa Trp Gly Pro Ser Pro Ile Ser His Pro Thr Ser Leu Cys Pro
     50                  55                  60
Gly Gly Gly Gly Ala Gly Gln Thr Thr Gly Ser Leu Cys Leu Gly Gln
 65                  70                  75                  80
Gln Cys Cys Pro Leu Ser Cys Pro Asn Ile Pro Ser Arg His Lys Arg
                 85                  90                  95
Trp Arg Leu Xaa Ala Ala Leu Val Ala Gly Ser Arg Gly Ser Cys Thr
            100                 105                 110
Leu Arg Ser Xaa Arg Xaa Arg Thr Pro Leu Pro Val Thr Arg Asn Leu
        115                 120                 125
Pro Arg Cys His Leu His Leu His Pro Thr Gly Asp Leu Arg Val His
    130                 135                 140
Val His Gln His Cys Leu Leu His Gly His Val Pro Pro Gly Ala Ala
145                 150                 155                 160
Leu Leu Gln Cys Gly Gly Cys Asp Leu Arg Gly Glu Ala Ala Gly Leu
                165                 170                 175
Leu Phe Leu Gly His Ala Cys Leu Arg Gly Ser Val Asn Leu Arg Arg
            180                 185                 190
Asp Gln Trp Leu Pro Val Pro Tyr Ser Arg Leu Cys Phe Ser Gly Ala
        195                 200                 205
Arg Glu Gly His Leu Pro Ser Leu Leu Ala Met Ile His Val Arg His
    210                 215                 220
Cys Thr Pro Ile Pro Ala Leu Leu Val Cys Pro Ile Lys Val Asn Leu
225                 230                 235                 240
Leu Ile Pro Val Ala Tyr Leu Val Phe Trp Ala Phe Leu Leu Val Phe
                245                 250                 255
Ser Phe Ile Ser Glu His Met Val Cys Gly Val Gly Val Ile Ile Ile
            260                 265                 270
Leu Thr Gly Val Pro Ile Phe Phe Leu Gly Val Phe Trp Arg Ser Lys
        275                 280                 285
Pro Lys Cys Val His Arg Leu Thr Glu Ser Met Thr His Trp Gly Gln
    290                 295                 300
Glu Leu Cys Phe Val Val Tyr Pro Gln Asp Ala Pro Glu Glu Glu Glu
305                 310                 315                 320
Asn Gly Pro Cys Pro Pro Ser Leu Leu Pro Ala Thr Asp Lys Pro Ser
                325                 330                 335
Lys Pro Gln
        339
```

<210> 1146
<211> 425
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(425)
<223> X = any amino acid or stop code

<400> 1146

```
Ala Ala Ala Leu Val Ala Glu Tyr Leu Ala Leu Leu Glu Asp His Arg
 1               5                  10                  15
His Leu Pro Val Gly Cys Val Ser Phe Gln Asn Ile Ser Ser Asn Val
            20                  25                  30
Leu Glu Glu Ser Ala Ile Ser Asp Asp Ile Leu Ser Pro Asp Glu Glu
        35                  40                  45
Gly Phe Cys Ser Gly Lys His Phe Thr Glu Leu Gly Leu Val Gly Leu
    50                  55                  60
```

```
Leu Glu Gln Ala Ala Gly Tyr Phe Thr Met Gly Gly Leu Tyr Glu Ala
 65                  70                  75                  80
Val Asn Glu Val Tyr Lys Asn Leu Ile Pro Ile Leu Glu Ala His Arg
                85                  90                  95
Asp Tyr Lys Lys Leu Ala Ala Val His Gly Lys Leu Gln Glu Ala Phe
            100                 105                 110
Thr Lys Ile Met His Gln Ser Ser Gly Trp Glu Arg Val Phe Gly Thr
        115                 120                 125
Tyr Phe Arg Val Gly Phe Tyr Gly Ala His Phe Gly Asp Leu Asp Glu
    130                 135                 140
Gln Glu Phe Val Tyr Lys Glu Pro Ser Ile Thr Lys Leu Ala Glu Ile
145                 150                 155                 160
Ser His Arg Leu Glu Glu Phe Tyr Thr Glu Arg Phe Gly Asp Asp Val
                165                 170                 175
Val Glu Ile Ile Lys Asp Ser Asn Pro Val Asp Lys Ser Lys Leu Asp
            180                 185                 190
Ser Gln Lys Ala Tyr Ile Gln Ile Thr Tyr Val Glu Pro Tyr Phe Asp
        195                 200                 205
Thr Tyr Glu Leu Lys Asp Arg Val Thr Tyr Phe Asp Arg Asn Tyr Gly
    210                 215                 220
Leu Arg Thr Phe Leu Phe Cys Thr Pro Phe Thr Pro Asp Gly Arg Ala
225                 230                 235                 240
His Gly Glu Leu Pro Glu Gln His Lys Arg Lys Thr Leu Leu Ser Thr
                245                 250                 255
Asp His Ala Phe Pro Tyr Ile Lys Thr Arg Ile Arg Val Cys His Arg
            260                 265                 270
Glu Glu Thr Val Leu Thr Pro Val Glu Val Ala Ile Glu Asp Met Gln
        275                 280                 285
Lys Lys Thr Arg Glu Leu Ala Phe Ala Thr Glu Gln Asp Pro Pro Asp
    290                 295                 300
Ala Lys Met Leu Gln Met Val Leu Gln Gly Ser Val Gly Pro Thr Val
305                 310                 315                 320
Asn Gln Gly Pro Leu Glu Val Ala Gln Val Phe Leu Ala Glu Ile Pro
                325                 330                 335
Glu Asp Pro Lys Leu Phe Arg His His Asn Lys Leu Arg Leu Cys Phe
            340                 345                 350
Lys Asp Phe Xaa Lys Lys Cys Glu Asp Ala Leu Arg Lys Asn Lys Ala
        355                 360                 365
Leu Ile Gly Pro Asp Gln Lys Glu Tyr His Arg Glu Leu Glu Arg Asn
    370                 375                 380
Tyr Cys Arg Leu Arg Glu Ala Leu Gln Pro Leu Leu Thr Gln Arg Leu
385                 390                 395                 400
Pro Gln Leu Met Ala Pro Thr Pro Pro Gly Leu Arg Asn Ser Leu Asn
                405                 410                 415
Arg Ala Ser Phe Arg Lys Ala Asp Leu
            420                 425
```

<210> 1147
<211> 198
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(198)
<223> X = any amino acid or stop code

<400> 1147

```
Gly Glu Gly Gln Gln Trp Gln Ser Thr Pro Leu Ser Pro Leu Gln Pro
```

```
  1               5                  10                  15
Thr Val Ala Asp Phe Leu Asn Leu Ala Trp Trp Thr Ser Ala Ala Ala
             20                  25                  30
Trp Xaa Val Leu Ser Gly Arg Trp Val Glu Lys Val Leu Pro Gly Arg
         35                  40                  45
Glu Gly Ser Glu Glu Lys Xaa Gly Met Ala Ser Ser Ser Ala Asp His
     50                  55                  60
Leu His Ser Ala Pro Arg Ala Leu Gln Ser Leu Phe Gln Gln Leu Leu
 65                  70                  75                  80
Tyr Gly Leu Ile Tyr His Ser Trp Phe Gln Ala Gly Arg Xaa Gly Phe
                 85                  90                  95
Gly Gly Ala Ser Ser Ser Pro Gly Pro Gln Ser Glu Leu Arg Arg Leu
            100                 105                 110
His Gly Glu Gly Gly Val Tyr Asp Xaa Gly Arg Pro Glu Thr Leu Pro
        115                 120                 125
Gly Ser Val Gly Gly Ala Glu Ala Leu Trp Ala Leu Ala Asp Pro Ala
    130                 135                 140
Glu Ala Glu Gly Ser Pro Glu Thr Arg Glu Ser Ser Cys Val Met Lys
145                 150                 155                 160
Gln Thr Gln Tyr Tyr Phe Gly Ser Val Asn Ala Ser Tyr Asn Ala Ile
                165                 170                 175
Ile Asp Cys Gly Asn Cys Ser Arg Cys Trp Gln Trp Gly Gly Thr Arg
            180                 185                 190
Gly Gln Gly Arg Asn Leu
        195         198
```

<210> 1148
<211> 317
<212>Amino acid
<213> Homo sapiens

<400> 1148

```
Val Ala Gly Ile Pro Ala Cys Phe Asp Asn Phe Thr Glu Ala Leu Ala
  1               5                  10                  15
Glu Thr Ala Cys Arg Gln Met Gly Tyr Ser Ser Lys Pro Thr Phe Arg
             20                  25                  30
Ala Val Glu Ile Gly Pro Asp Gln Asp Leu Asp Val Val Glu Ile Thr
         35                  40                  45
Glu Asn Ser Gln Glu Leu Arg Met Arg Asn Ser Ser Gly Pro Cys Leu
     50                  55                  60
Ser Gly Ser Leu Val Ser Leu His Cys Leu Ala Cys Gly Glu Ser Leu
 65                  70                  75                  80
Lys Thr Pro Arg Val Val Gly Gly Glu Glu Ala Ser Val Asp Ser Trp
                 85                  90                  95
Pro Trp Gln Val Ser Ile Gln Tyr Asp Lys Gln His Val Cys Gly Gly
            100                 105                 110
Ser Ile Leu Asp Pro His Trp Val Leu Thr Ala Ala His Cys Phe Arg
        115                 120                 125
Lys His Thr Asp Val Phe Asn Trp Lys Val Arg Ala Gly Ser Asp Lys
    130                 135                 140
Leu Gly Ser Phe Pro Ser Leu Ala Val Ala Lys Ile Ile Ile Ile Glu
145                 150                 155                 160
Phe Asn Pro Met Tyr Pro Lys Asp Asn Asp Ile Ala Leu Met Lys Leu
                165                 170                 175
Gln Phe Pro Leu Thr Phe Ser Gly Thr Val Arg Pro Ile Cys Leu Pro
            180                 185                 190
Phe Phe Asp Glu Glu Leu Thr Pro Ala Thr Pro Leu Trp Ile Ile Gly
        195                 200                 205
Trp Gly Phe Thr Lys Gln Asn Gly Gly Lys Met Ser Asp Ile Leu Leu
```

```
    210                 215                 220
Gln Ala Ser Val Gln Val Ile Asp Ser Thr Arg Cys Asn Ala Asp Asp
225                 230                 235                 240
Ala Tyr Gln Gly Glu Val Thr Glu Lys Met Met Cys Ala Gly Ile Pro
                245                 250                 255
Glu Gly Gly Val Asp Thr Cys Gln Gly Asp Ser Gly Gly Pro Leu Met
            260                 265                 270
Tyr Gln Ser Asp Gln Trp His Val Val Gly Ile Val Ser Trp Gly Tyr
        275                 280                 285
Gly Cys Gly Gly Pro Ser Thr Pro Gly Val Tyr Thr Lys Val Ser Ala
    290                 295                 300
Tyr Leu Asn Trp Ile Tyr Asn Val Trp Lys Ala Glu Leu
305                 310                 315     317
```

<210> 1149
<211> 320
<212>Amino acid
<213> Homo sapiens

<400> 1149

```
Thr Ile Ser Thr Val Arg Trp Asn Ser Arg Ile Gly Met Val Leu Gly
  1                 5                  10                  15
Val Ala Ile Gln Lys Arg Ala Val Pro Gly Leu Tyr Ala Phe Glu Glu
             20                  25                  30
Ala Tyr Ala Arg Ala Asp Lys Glu Ala Pro Arg Pro Cys His Lys Gly
         35                  40                  45
Ser Trp Cys Ser Ser Asn Gln Leu Cys Arg Glu Cys Gln Ala Phe Met
     50                  55                  60
Ala His Thr Met Pro Lys Leu Lys Ala Phe Ser Met Ser Ser Ala Tyr
 65                  70                  75                  80
Asn Ala Tyr Arg Ala Val Tyr Ala Val Ala His Gly Leu His Gln Leu
                 85                  90                  95
Leu Gly Cys Ala Ser Gly Ala Cys Ser Arg Gly Arg Val Tyr Pro Trp
            100                 105                 110
Gln Leu Leu Glu Gln Ile His Lys Val His Phe Leu Leu His Lys Asp
        115                 120                 125
Thr Val Ala Phe Asn Asp Asn Arg Asp Pro Leu Ser Ser Tyr Asn Ile
    130                 135                 140
Ile Ala Trp Asp Trp Asn Gly Pro Lys Trp Thr Phe Thr Val Leu Gly
145                 150                 155                 160
Ser Ser Thr Trp Ser Pro Val Gln Leu Asn Ile Asn Glu Thr Lys Ile
                165                 170                 175
Gln Trp His Gly Lys Asp Asn Gln Val Pro Lys Ser Val Cys Ser Ser
            180                 185                 190
Asp Cys Leu Glu Gly His Gln Arg Val Val Thr Gly Phe His His Cys
        195                 200                 205
Cys Phe Glu Cys Val Pro Cys Gly Ala Gly Thr Phe Leu Asn Lys Ser
    210                 215                 220
Ser Tyr Leu Gly Lys Asp Leu Pro Glu Asn Tyr Asn Glu Ala Lys Cys
225                 230                 235                 240
Val Thr Phe Ser Leu Leu Phe Asn Phe Val Ser Trp Ile Ala Phe Phe
                245                 250                 255
Thr Thr Ala Ser Val Tyr Asp Gly Lys Tyr Leu Pro Ala Ala Asn Met
            260                 265                 270
Met Ala Gly Leu Ser Ser Leu Ser Ser Gly Phe Gly Gly Tyr Phe Leu
        275                 280                 285
Pro Lys Cys Tyr Val Ile Leu Cys Arg Pro Asp Leu Asn Ser Thr Glu
    290                 295                 300
His Phe Gln Ala Ser Ile Gln Asp Tyr Thr Arg Arg Cys Gly Ser Thr
```

305 310 315 320

<210> 1150
<211> 458
<212>Amino acid
<213> Homo sapiens

<400> 1150

```
Val Ala Arg Gly Ala Phe His Pro Lys Met Gly Pro Ser Phe Pro Ser
  1               5                  10                  15
Pro Lys Pro Gly Ser Glu Arg Leu Ser Phe Val Ser Ala Lys Gln Ser
             20                  25                  30
Thr Gly Gln Asp Thr Glu Ala Glu Leu Gln Asp Ala Thr Leu Ala Leu
         35                  40                  45
His Gly Leu Thr Val Glu Asp Glu Gly Asn Tyr Thr Cys Glu Phe Ala
     50                  55                  60
Thr Phe Pro Lys Gly Ser Val Arg Gly Met Thr Trp Leu Arg Val Ile
 65                  70                  75                  80
Ala Lys Pro Lys Asn Gln Ala Glu Ala Gln Lys Val Thr Phe Ser Gln
                 85                  90                  95
Asp Pro Thr Thr Val Ala Leu Cys Ile Ser Lys Glu Gly Arg Pro Pro
            100                 105                 110
Ala Arg Ile Ser Trp Leu Ser Ser Leu Asp Trp Glu Ala Lys Glu Thr
        115                 120                 125
Gln Val Ser Gly Thr Leu Ala Gly Thr Val Thr Val Thr Ser Arg Phe
    130                 135                 140
Thr Leu Val Pro Ser Gly Arg Ala Asp Gly Val Thr Val Thr Cys Lys
145                 150                 155                 160
Val Glu His Glu Ser Phe Glu Glu Pro Ala Leu Ile Pro Val Thr Leu
                165                 170                 175
Ser Val Arg Tyr Pro Pro Glu Val Ser Ile Ser Gly Tyr Asp Asp Asn
            180                 185                 190
Trp Tyr Leu Gly Arg Thr Asp Ala Thr Leu Ser Cys Asp Val Arg Ser
        195                 200                 205
Asn Pro Glu Pro Thr Gly Tyr Asp Trp Ser Thr Thr Ser Gly Thr Phe
    210                 215                 220
Pro Thr Ser Ala Val Ala Gln Gly Ser Gln Leu Val Ile His Ala Val
225                 230                 235                 240
Asp Ser Leu Phe Asn Thr Thr Phe Val Cys Thr Val Thr Asn Ala Val
                245                 250                 255
Gly Met Gly Arg Ala Glu Gln Val Ile Phe Val Arg Glu Thr Pro Asn
            260                 265                 270
Thr Ala Gly Ala Gly Ala Thr Gly Gly Ile Ile Gly Gly Ile Ile Ala
        275                 280                 285
Ala Ile Ile Ala Thr Ala Asp Ala Thr Gly Ile Leu Ile Cys Arg Gln
    290                 295                 300
Gln Arg Lys Glu Gln Thr Leu Gln Gly Ala Glu Glu Asp Glu Asp Leu
305                 310                 315                 320
Glu Gly Pro Pro Ser Tyr Lys Pro Pro Thr Pro Lys Ala Lys Leu Glu
                325                 330                 335
Ala Gln Glu Met Pro Ser Gln Leu Phe Thr Leu Gly Ala Ser Glu His
            340                 345                 350
Ser Pro Leu Lys Thr Pro Tyr Phe Asp Ala Gly Ala Ser Cys Thr Glu
        355                 360                 365
Gln Glu Met Pro Arg Tyr His Glu Leu Pro Thr Leu Glu Glu Arg Ser
    370                 375                 380
Gly Pro Leu His Pro Gly Ala Thr Ser Leu Gly Ser Pro Ile Pro Val
```

```
385                 390                 395                 400
Pro Pro Gly Pro Pro Ala Val Glu Asp Val Ser Leu Asp Leu Glu Asp
                405                 410                 415
Glu Glu Gly Glu Glu Glu Glu Glu Tyr Leu Asp Lys Ile Asn Pro Ile
            420                 425                 430
Tyr Asp Ala Leu Ser Tyr Ser Ser Pro Ser Asp Ser Tyr Gln Gly Lys
        435                 440                 445
Gly Phe Val Met Ser Arg Ala Met Tyr Val
    450                 455         458
```

<210> 1151
<211> 608
<212>Amino acid
<213> Homo sapiens

<400> 1151

```
Gly Thr Arg Leu Arg Glu Asp Lys Asn His Asn Met Tyr Val Ala Gly
  1                 5                  10                  15
Cys Thr Glu Val Glu Val Lys Ser Thr Glu Glu Ala Phe Glu Val Phe
             20                  25                  30
Trp Arg Gly Gln Lys Lys Arg Arg Ile Ala Asn Thr His Leu Asn Arg
         35                  40                  45
Glu Ser Ser Arg Ser His Ser Val Phe Asn Ile Lys Leu Val Gln Ala
     50                  55                  60
Pro Leu Asp Ala Asp Gly Asp Asn Val Leu Gln Glu Lys Glu Gln Ile
 65                  70                  75                  80
Thr Ile Ser Gln Leu Ser Leu Val Asp Leu Ala Gly Ser Glu Arg Thr
                 85                  90                  95
Asn Arg Thr Arg Ala Glu Gly Asn Arg Leu Arg Glu Ala Gly Asn Ile
            100                 105                 110
Asn Gln Ser Leu Met Thr Leu Arg Thr Cys Met Asp Val Leu Arg Glu
        115                 120                 125
Asn Gln Met Tyr Gly Thr Asn Lys Met Val Pro Tyr Arg Asp Ser Lys
    130                 135                 140
Leu Thr His Leu Phe Lys Asn Tyr Phe Asp Gly Glu Gly Lys Val Arg
145                 150                 155                 160
Met Ile Val Cys Val Asn Pro Lys Ala Glu Asp Tyr Glu Glu Asn Leu
                165                 170                 175
Gln Val Met Arg Phe Ala Glu Val Thr Gln Glu Val Glu Val Ala Arg
            180                 185                 190
Pro Val Asp Lys Ala Ile Cys Gly Leu Thr Pro Gly Arg Arg Tyr Arg
        195                 200                 205
Asn Gln Pro Arg Gly Pro Ile Gly Asn Glu Pro Leu Val Thr Asp Val
    210                 215                 220
Val Leu Gln Ser Phe Pro Pro Leu Pro Ser Cys Glu Ile Leu Asp Ile
225                 230                 235                 240
Asn Asp Glu Gln Thr Leu Pro Arg Leu Ile Glu Ala Leu Glu Lys Arg
                245                 250                 255
His Asn Leu Arg Gln Met Met Ile Asp Glu Phe Asn Lys Gln Ser Asn
            260                 265                 270
Ala Phe Lys Ala Leu Leu Gln Glu Phe Asp Asn Ala Val Leu Ser Lys
        275                 280                 285
Glu Asn His Met Gln Gly Lys Leu Asn Glu Lys Glu Lys Met Ile Ser
    290                 295                 300
Gly Gln Lys Leu Glu Ile Glu Arg Leu Glu Lys Lys Asn Lys Thr Leu
305                 310                 315                 320
Glu Tyr Lys Ile Glu Ile Leu Glu Lys Thr Thr Thr Ile Tyr Glu Glu
                325                 330                 335
Asp Lys Arg Asn Leu Gln Gln Glu Leu Glu Thr Gln Asn Gln Lys Leu
```

```
            340                 345                 350
Gln Arg Gln Phe Ser Asp Lys Arg Arg Leu Glu Ala Arg Leu Gln Gly
        355                 360                 365
Met Val Thr Glu Thr Thr Met Lys Trp Glu Lys Glu Cys Glu Arg Arg
    370                 375                 380
Val Ala Ala Lys Gln Leu Glu Met Gln Asn Lys Leu Trp Val Lys Asp
385                 390                 395                 400
Glu Lys Leu Lys Gln Leu Lys Ala Ile Val Thr Glu Pro Lys Thr Glu
                405                 410                 415
Lys Pro Glu Arg Pro Ser Arg Glu Arg Asp Arg Glu Lys Val Thr Gln
            420                 425                 430
Arg Ser Val Ser Pro Ser Pro Val Pro Leu Leu Phe Gln Pro Asp Gln
        435                 440                 445
Asn Ala Pro Pro Ile Arg Leu Arg His Arg Arg Ser Arg Ser Ala Gly
    450                 455                 460
Asp Arg Trp Val Asp His Lys Pro Ala Ser Asn Met Gln Thr Glu Thr
465                 470                 475                 480
Val Met Gln Pro His Val Pro His Ala Ile Thr Val Ser Val Ala Asn
                485                 490                 495
Glu Lys Ala Leu Ala Lys Cys Glu Lys Tyr Met Leu Thr His Gln Glu
            500                 505                 510
Leu Ala Ser Asp Gly Glu Ile Glu Thr Lys Leu Ile Lys Gly Asp Ile
        515                 520                 525
Tyr Lys Thr Arg Gly Gly Gly Gln Ser Val Gln Phe Thr Asp Ile Glu
    530                 535                 540
Thr Leu Lys Gln Glu Ser Pro Asn Gly Ser Arg Lys Arg Arg Ser Ser
545                 550                 555                 560
Thr Val Ala Pro Ala Gln Pro Asp Gly Ala Glu Ser Glu Trp Thr Asp
                565                 570                 575
Val Glu Thr Arg Cys Ser Val Ala Val Glu Met Arg Ala Gly Ser Gln
            580                 585                 590
Leu Gly Pro Gly Tyr Gln His His Ala Gln Pro Lys Arg Lys Lys Pro
        595                 600                 605         608
```

<210> 1152
<211> 111
<212>Amino acid
<213> Homo sapiens

<400> 1152

```
Pro Phe Ser Ser Ser Ser Val Ser Ser Lys Gly Ser Asp Pro Phe Gly
  1               5                  10                  15
Thr Leu Asp Pro Phe Gly Ser Gly Ser Phe Asn Ser Ala Glu Gly Phe
             20                  25                  30
Ala Asp Phe Ser Gln Met Ser Lys Gly Lys Ser Thr Pro Val Ser Gln
         35                  40                  45
Leu Gly Ser Ala Asp Phe Pro Glu Ala Pro Asp Pro Phe Gln Pro Leu
     50                  55                  60
Gly Ala Asp Ser Gly Asp Pro Phe Gln Ser Lys Lys Gly Phe Gly Asp
 65                  70                  75                  80
Pro Phe Ser Gly Lys Asp Pro Phe Val Pro Ser Ser Ala Ala Lys Pro
                 85                  90                  95
Ser Lys Ala Ser Ala Ser Gly Phe Ala Asp Phe Thr Ser Val Ser
            100                 105                 110 111
```

<210> 1153

<211> 444
<212>Amino acid
<213> Homo sapiens

<400> 1153

```
Met Ser Leu Met Val Val Ser Met Ala Cys Val Gly Leu Phe Leu Val
  1               5                  10                  15
Gln Arg Ala Gly Pro His Met Gly Gly Gln Asp Lys Pro Phe Leu Ser
             20                  25                  30
Ala Trp Pro Ser Ala Val Val Pro Arg Gly Gly His Val Thr Leu Arg
         35                  40                  45
Cys His Tyr Arg His Arg Phe Asn Asn Phe Met Leu Tyr Lys Glu Asp
     50                  55                  60
Arg Ile His Ile Pro Ile Phe His Gly Arg Ile Phe Gln Glu Ser Phe
 65                  70                  75                  80
Asn Met Ser Pro Val Thr Thr Ala His Ala Gly Asn Tyr Thr Cys Arg
                 85                  90                  95
Gly Ser His Pro His Ser Pro Thr Gly Trp Ser Ala Pro Ser Asn Pro
            100                 105                 110
Val Val Ile Met Val Thr Gly Asn His Arg Lys Pro Ser Leu Leu Ala
        115                 120                 125
His Pro Gly Pro Leu Val Lys Ser Gly Glu Arg Val Ile Leu Gln Cys
    130                 135                 140
Trp Ser Asp Ile Met Phe Glu His Phe Phe Leu His Lys Glu Gly Ile
145                 150                 155                 160
Ser Lys Asp Pro Ser Arg Leu Val Gly Gln Ile His Asp Gly Val Ser
                165                 170                 175
Lys Ala Asn Phe Ser Ile Gly Pro Met Met Gln Asp Leu Ala Gly Thr
            180                 185                 190
Tyr Arg Cys Tyr Gly Ser Val Thr His Ser Pro Tyr Gln Leu Ser Ala
        195                 200                 205
Pro Ser Asp Pro Leu Asp Ile Val Ile Thr Gly Leu Tyr Glu Lys Pro
    210                 215                 220
Ser Leu Ser Ala Gln Pro Gly Pro Thr Val Leu Ala Gly Glu Ser Val
225                 230                 235                 240
Thr Leu Ser Cys Ser Ser Arg Ser Ser Tyr Asp Met Tyr His Leu Ser
                245                 250                 255
Arg Glu Gly Glu Ala His Glu Arg Arg Phe Ser Ala Gly Pro Lys Val
            260                 265                 270
Asn Gly Thr Phe Gln Ala Asp Phe Pro Leu Gly Pro Ala Thr His Gly
        275                 280                 285
Gly Thr Tyr Arg Cys Phe Gly Ser Phe Arg Asp Ser Pro Tyr Glu Trp
    290                 295                 300
Ser Asn Ser Ser Asp Pro Leu Leu Val Ser Val Thr Gly Asn Pro Ser
305                 310                 315                 320
Asn Ser Trp Pro Ser Pro Thr Glu Pro Ser Ser Glu Thr Gly Asn Pro
                325                 330                 335
Arg His Leu His Val Leu Ile Gly Thr Ser Val Val Ile Ile Leu Phe
            340                 345                 350
Ile Leu Leu Leu Phe Phe Leu Leu His Arg Trp Cys Ser Asn Lys Lys
        355                 360                 365
Asn Ala Ala Val Met Asp Gln Glu Ser Ala Gly Asn Arg Thr Ala Asn
    370                 375                 380
Ser Glu Asp Ser Asp Glu Gln Asp Pro Gln Glu Val Thr Tyr Thr Gln
385                 390                 395                 400
Leu Asn His Cys Val Phe Thr Gln Arg Lys Ile Thr Arg Pro Ser Gln
                405                 410                 415
Arg Pro Lys Thr Pro Pro Thr Asp Ile Ile Val Tyr Thr Glu Leu Pro
            420                 425                 430
Asn Ala Glu Ser Arg Ser Lys Val Val Ser Cys Pro
```

435 440 444

<210> 1154
<211> 522
<212>Amino acid
<213> Homo sapiens

<400> 1154

```
Met Ser Leu Arg Val His Thr Leu Pro Thr Leu Leu Gly Ala Val Val
  1               5                  10                  15
Arg Pro Gly Cys Arg Glu Leu Leu Cys Leu Leu Met Ile Thr Val Thr
             20                  25                  30
Val Gly Pro Gly Ala Ser Gly Val Cys Pro Thr Ala Cys Ile Cys Ala
         35                  40                  45
Thr Asp Ile Val Ser Cys Thr Asn Lys Asn Leu Ser Lys Val Pro Gly
     50                  55                  60
Asn Leu Phe Arg Leu Ile Lys Arg Leu Asp Leu Ser Tyr Asn Arg Ile
 65                  70                  75                  80
Gly Leu Leu Asp Ser Glu Trp Ile Pro Val Ser Phe Ala Lys Leu Asn
                 85                  90                  95
Thr Leu Ile Leu Arg His Asn Asn Ile Thr Ser Ile Ser Thr Gly Ser
            100                 105                 110
Phe Ser Thr Thr Pro Asn Leu Lys Cys Leu Asp Leu Ser Ser Asn Lys
        115                 120                 125
Leu Lys Thr Val Lys Asn Ala Val Phe Gln Glu Leu Lys Val Leu Glu
    130                 135                 140
Val Leu Leu Leu Tyr Asn Asn His Ile Ser Tyr Leu Asp Pro Ser Ala
145                 150                 155                 160
Phe Gly Gly Leu Ser Gln Leu Gln Lys Leu Tyr Leu Ser Gly Asn Phe
                165                 170                 175
Leu Thr Gln Phe Pro Met Asp Leu Tyr Val Gly Arg Phe Lys Leu Ala
            180                 185                 190
Glu Leu Met Phe Leu Asp Val Ser Tyr Asn Arg Ile Pro Ser Met Pro
        195                 200                 205
Met His His Ile Asn Leu Val Pro Gly Lys Gln Leu Arg Gly Ile Tyr
    210                 215                 220
Leu His Gly Asn Pro Phe Val Cys Asp Cys Ser Leu Val Ser Leu Leu
225                 230                 235                 240
Val Phe Trp Tyr Arg Arg His Phe Ser Ser Val Met Asp Phe Lys Asn
                245                 250                 255
Asp Tyr Thr Cys Arg Leu Trp Ser Asp Ser Arg His Ser Arg Gln Val
            260                 265                 270
Leu Leu Leu Gln Asp Ser Phe Met Asn Cys Ser Asp Ser Ile Ile Asn
        275                 280                 285
Gly Ser Phe Arg Ala Leu Gly Phe Ile His Glu Ala Gln Val Gly Glu
    290                 295                 300
Arg Leu Met Val His Cys Asp Ser Lys Thr Gly Asn Ala Asn Thr Asp
305                 310                 315                 320
Phe Ile Trp Val Gly Pro Asp Asn Arg Leu Leu Glu Pro Asp Lys Glu
                325                 330                 335
Met Glu Asn Phe Tyr Val Phe His Asn Gly Ser Leu Val Ile Glu Ser
            340                 345                 350
Pro Arg Phe Glu Asp Ala Gly Val Tyr Ser Cys Ile Ala Met Asn Lys
        355                 360                 365
Gln Arg Leu Leu Asn Glu Thr Val Asp Val Thr Ile Asn Val Ser Asn
    370                 375                 380
Phe Thr Val Ser Arg Ser His Ala His Glu Ala Phe Asn Thr Ala Phe
385                 390                 395                 400
Thr Thr Leu Ala Ala Cys Val Ala Ser Ile Val Leu Val Leu Leu Tyr
```

```
                405                 410                 415
Leu Tyr Leu Thr Pro Cys Pro Cys Lys Cys Lys Thr Lys Arg Gln Lys
            420                 425                 430
Asn Met Leu His Gln Ser Asn Ala His Ser Ser Ile Leu Ser Pro Gly
        435                 440                 445
Pro Ala Ser Asp Ala Ser Ala Asp Glu Arg Lys Ala Gly Ala Gly Lys
    450                 455                 460
Arg Val Val Phe Leu Glu Pro Leu Lys Asp Thr Ala Ala Gly Gln Asn
465                 470                 475                 480
Gly Lys Val Arg Leu Phe Pro Ser Glu Ala Val Ile Ala Glu Gly Ile
                485                 490                 495
Leu Lys Ser Thr Arg Gly Lys Ser Asp Ser Asp Ser Val Asn Ser Val
            500                 505                 510
Phe Ser Asp Thr Pro Phe Val Ala Ser Thr
        515                 520     522
```

<210> 1155
<211> 642
<212>Amino acid
<213> Homo sapiens

<400> 1155

```
Ala Ser Asp Phe Ile Arg Ser Leu Asp His Cys Gly Tyr Leu Ser Leu
  1               5                  10                  15
Glu Gly Val Phe Ser His Lys Phe Asp Phe Glu Leu Gln Asp Val Ser
             20                  25                  30
Ser Val Asn Glu Asp Val Leu Leu Thr Thr Gly Leu Leu Cys Lys Tyr
         35                  40                  45
Thr Ala Gln Arg Phe Lys Pro Lys Tyr Lys Phe Phe His Lys Ser Phe
     50                  55                  60
Gln Glu Tyr Thr Ala Gly Arg Arg Leu Ser Ser Leu Leu Thr Ser His
 65                  70                  75                  80
Glu Pro Glu Glu Val Thr Lys Gly Asn Gly Tyr Leu Gln Lys Met Val
                 85                  90                  95
Ser Ile Ser Asp Ile Thr Ser Thr Tyr Ser Ser Leu Leu Arg Tyr Thr
            100                 105                 110
Cys Gly Ser Ser Val Glu Ala Thr Arg Ala Val Met Lys His Leu Ala
        115                 120                 125
Ala Val Tyr Gln His Gly Cys Leu Leu Gly Leu Ser Ile Ala Lys Arg
    130                 135                 140
Pro Leu Trp Arg Gln Glu Ser Leu Gln Ser Val Lys Asn Thr Thr Glu
145                 150                 155                 160
Gln Glu Ile Leu Lys Ala Ile Asn Ile Asn Ser Phe Val Glu Cys Gly
                165                 170                 175
Ile His Leu Tyr Gln Glu Ser Thr Ser Lys Ser Ala Leu Ser Gln Glu
            180                 185                 190
Phe Glu Ala Phe Phe Gln Gly Lys Ser Leu Tyr Ile Asn Ser Gly Asn
        195                 200                 205
Ile Pro Asp Tyr Leu Phe Asp Phe Phe Glu His Leu Pro Asn Cys Ala
    210                 215                 220
Ser Ala Leu Asp Phe Ile Lys Leu Gly Phe Tyr Gly Gly Ala Met Ala
225                 230                 235                 240
Ser Trp Glu Lys Ala Ala Glu Asp Thr Gly Gly Ile His Met Glu Glu
                245                 250                 255
Ala Pro Glu Thr Tyr Ile Pro Ser Arg Ala Val Ser Leu Phe Phe Asn
            260                 265                 270
Trp Lys Gln Glu Phe Arg Thr Leu Glu Val Thr Leu Arg Asp Phe Ser
        275                 280                 285
Lys Leu Asn Lys Gln Asp Ile Arg Tyr Leu Gly Lys Ile Phe Ser Ser
```

```
    290                 295                 300
Ala Thr Ser Leu Arg Leu Gln Ile Lys Arg Cys Ala Gly Val Ala Gly
305                 310                 315                 320
Ser Leu Ser Leu Val Leu Ser Thr Cys Lys Asn Ile Tyr Ser Leu Met
                325                 330                 335
Val Glu Ala Ser Pro Leu Thr Ile Glu Asp Glu Arg His Ile Thr Ser
            340                 345                 350
Val Thr Asn Leu Lys Thr Leu Ser Ile His Asp Leu Gln Asn Gln Arg
        355                 360                 365
Leu Pro Gly Gly Leu Thr Asp Ser Leu Gly Asn Leu Lys Asn Leu Thr
    370                 375                 380
Lys Leu Ile Met Asp Asn Ile Lys Met Asn Glu Glu Asp Ala Ile Lys
385                 390                 395                 400
Leu Ala Glu Gly Leu Lys Asn Leu Lys Lys Met Cys Leu Phe His Leu
                405                 410                 415
Thr His Leu Ser Asp Ile Gly Glu Gly Met Asp Tyr Ile Val Lys Ser
            420                 425                 430
Leu Ser Ser Glu Pro Cys Asp Leu Glu Glu Ile Gln Leu Val Ser Cys
        435                 440                 445
Cys Leu Ser Ala Asn Ala Val Lys Ile Leu Ala Gln Asn Leu His Asn
    450                 455                 460
Leu Val Lys Leu Ser Ile Leu Asp Leu Ser Glu Asn Tyr Leu Glu Lys
465                 470                 475                 480
Asp Gly Asn Glu Ala Leu His Glu Leu Ile Asp Arg Met Asn Val Leu
                485                 490                 495
Glu Gln Leu Thr Ala Leu Met Leu Pro Trp Gly Cys Asp Val Gln Gly
            500                 505                 510
Ser Leu Ser Ser Leu Leu Lys His Leu Glu Glu Val Pro Gln Leu Val
        515                 520                 525
Lys Leu Gly Leu Lys Asn Trp Arg Leu Thr Asp Thr Glu Ile Arg Ile
    530                 535                 540
Leu Gly Ala Phe Phe Gly Lys Asn Pro Leu Lys Asn Phe Gln Gln Leu
545                 550                 555                 560
Asn Leu Ala Gly Asn Arg Val Ser Ser Asp Gly Trp Leu Ala Phe Met
                565                 570                 575
Gly Val Phe Glu Asn Leu Lys Gln Leu Val Phe Phe Asp Phe Ser Thr
            580                 585                 590
Lys Glu Phe Leu Pro Asp Pro Ala Leu Val Arg Lys Leu Ser Gln Val
        595                 600                 605
Leu Ser Lys Leu Thr Phe Leu Gln Glu Ala Arg Leu Val Gly Trp Gln
    610                 615                 620
Phe Asp Asp Asp Asp Leu Ser Val Ile Thr Gly Ala Phe Lys Leu Val
625                 630                 635                 640
Thr Ala
    642
```

<210> 1156
<211> 125
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(125)
<223> X = any amino acid or stop code

<400> 1156

```
Ala Ser Asp Arg Lys Val Ala Met Thr Cys Asp Cys Phe Trp Phe Arg
  1               5                  10                  15
```

```
Thr Met Leu Asp Gln His Ala Ser Cys Met Glu Val Gly Thr Glu Arg
            20                  25                  30
Glu Arg Gln Ala Gly Gly Leu Val Met Phe Asp Pro Ser Gly Phe Pro
        35                  40                  45
Thr Gly Glu Lys Val Leu Gln Asp Asp Glu Phe Thr Cys Asp Leu Phe
    50                  55                  60
Arg Phe Leu Gln Leu Leu Cys Glu Gly His Asn Ser Gly Leu Xaa Val
65                  70                  75                  80
Pro Gly Thr Ser Asp Asp Thr Lys Ala Xaa Ile Met Phe Ser Ser Gln
                85                  90                  95
Xaa Xaa Gln Glu Pro Val Ser Ser Asn Tyr Ala Ser Phe Xaa Arg Gln
            100                 105                 110
Gln Ile Ile Leu Glu His Gly Ser Ala Leu Gly Ser Gly
        115                 120                 125
```

<210> 1157
<211> 91
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(91)
<223> X = any amino acid or stop code

<400> 1157

```
Glu Ile Thr His Ile Val Gly Glu Thr Ala Ala Phe Leu Cys Pro Arg
 1               5                  10                  15
Leu Arg Leu Arg Arg Gly Gly Lys Asp Gly Ser Pro Lys Pro Gly Phe
            20                  25                  30
Leu Ala Ser Val Ile Pro Val Asp Arg Arg Pro Gly Glu Xaa Asp Ile
        35                  40                  45
Thr His Ile Val Gly Glu Thr Ala Ala Phe Leu Cys Pro Arg Leu Arg
    50                  55                  60
Leu Arg Arg Gly Gly Lys Asp Gly Ser Pro Lys Pro Gly Phe Leu Ala
65                  70                  75                  80
Ser Val Ile Pro Val Asp Arg Arg Pro Gly Glu
                85                  90  91
```

<210> 1158
<211> 254
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(254)
<223> X = any amino acid or stop code

<400> 1158

```
Ser Lys Phe Ile Phe Tyr Val Asp Ser Gln Ser Met Ile Phe Phe Phe
 1               5                  10                  15
Gln Thr Pro Thr Arg His Lys Val Leu Ile Met Glu Phe Cys Pro Cys
            20                  25                  30
```

```
Gly Ser Leu Tyr Thr Val Leu Glu Glu Pro Ser Asn Ala Tyr Gly Leu
          35                  40                  45
Pro Glu Ser Glu Phe Leu Ile Val Leu Arg Asp Val Val Gly Gly Met
      50                  55                  60
Asn His Leu Arg Glu Asn Gly Ile Val His Arg Asp Ile Lys Pro Gly
 65                  70                  75                  80
Asn Ile Met Arg Val Ile Gly Glu Asp Gly Gln Ser Val Tyr Lys Leu
                 85                  90                  95
Thr Asp Phe Gly Ala Ala Arg Glu Leu Glu Asp Asp Glu Gln Phe Val
            100                 105                 110
Ser Leu Tyr Gly Thr Glu Glu Tyr Leu His Pro Asp Met Tyr Glu Arg
        115                 120                 125
Ala Val Leu Arg Lys Asp His Gln Lys Lys Tyr Gly Ala Thr Val Asp
    130                 135                 140
Leu Trp Ser Ile Gly Val Thr Phe Tyr Gln Gly Lys Pro Thr Gly Ser
145                 150                 155                 160
Leu Ala Ile Xaa His Pro Phe Glu Gly Ala Ser Val Arg Asn Lys Ala
                165                 170                 175
Ser Asp Gly Ile Lys Ile Ile Thr Gly Lys Gly Leu Leu Gly Ala Ile
            180                 185                 190
Ser Gly Val Gln Lys Ser Lys Lys Asn Gly Pro Ile Asp Trp Glu Trp
        195                 200                 205
Glu Asp Met Pro Val Ser Cys Ser Pro Ser Ser Gly Val Leu Arg Val
    210                 215                 220
Pro Asn Leu Pro Pro Val Leu Ala Asn Ile Leu Glu Ser Arg Ser Arg
225                 230                 235                 240
Lys Lys Cys Trp Gly Phe Xaa Pro Ser Phe Leu Gln Glu Asn
                245                 250             254
```

<210> 1159
<211> 162
<212>Amino acid
<213> Homo sapiens

<400> 1159

```
Gly Ser Thr Ile Ser Cys Glu Arg Ser Leu Arg Ser Leu Trp Thr Ala
  1               5                  10                  15
His Trp Ala Leu Pro Glu Met Asp Ser Arg Ile Pro Tyr Asp Asp Tyr
            20                  25                  30
Pro Val Val Phe Leu Pro Ala Tyr Glu Asn Pro Pro Ala Trp Ile Pro
        35                  40                  45
Pro His Glu Arg Val His His Pro Asp Tyr Asn Asn Glu Leu Thr Gln
    50                  55                  60
Phe Leu Pro Arg Thr Ile Thr Leu Lys Lys Pro Pro Gly Ala Gln Leu
65                  70                  75                  80
Gly Phe Asn Ile Arg Gly Gly Lys Ala Ser Gln Leu Gly Ile Phe Ile
                85                  90                  95
Ser Lys Val Ile Pro Asp Ser Asp Ala His Arg Ala Gly Leu Gln Glu
            100                 105                 110
Gly Asp Gln Val Leu Ala Val Asn Asp Val Asp Phe Gln Asp Ile Glu
        115                 120                 125
His Ser Lys Ala Val Glu Ile Leu Lys Thr Ala Arg Glu Ile Ser Met
    130                 135                 140
Arg Val Arg Phe Phe Pro Tyr Asn Tyr His Arg Gln Lys Glu Arg Thr
145                 150                 155                 160
Val His
    162
```

<210> 1160
<211> 295
<212>Amino acid
<213> Homo sapiens

<400> 1160

```
His Glu Gln Val Ser Ala Leu His Arg Arg Ile Lys Ala Ile Val Glu
 1               5                  10                  15
Val Ala Ala Met Cys Gly Val Asn Ile Ile Cys Phe Gln Glu Ala Trp
            20                  25                  30
Thr Met Pro Phe Ala Phe Cys Thr Arg Glu Lys Leu Pro Trp Thr Glu
        35                  40                  45
Phe Ala Glu Ser Ala Glu Asp Gly Pro Thr Thr Arg Phe Cys Gln Lys
    50                  55                  60
Leu Ala Lys Asn His Asp Met Val Val Val Ser Pro Ile Leu Glu Arg
65                  70                  75                  80
Asp Ser Glu His Gly Asp Val Leu Trp Asn Thr Ala Val Val Ile Ser
                85                  90                  95
Asn Ser Gly Ala Val Leu Gly Lys Thr Arg Lys Asn His Ile Pro Arg
            100                 105                 110
Val Gly Asp Phe Asn Glu Ser Thr Tyr Tyr Met Glu Gly Asn Leu Gly
        115                 120                 125
His Pro Val Phe Gln Thr Gln Phe Gly Arg Ile Ala Val Asn Ile Cys
    130                 135                 140
Tyr Gly Arg His His Pro Leu Asn Trp Leu Met Tyr Ser Ile Asn Gly
145                 150                 155                 160
Ala Glu Ile Ile Phe Asn Pro Ser Ala Thr Ile Gly Ala Leu Ser Glu
                165                 170                 175
Ser Leu Trp Pro Ile Glu Ala Arg Asn Ala Ala Ile Ala Asn His Cys
            180                 185                 190
Phe Thr Cys Ala Ile Asn Arg Val Gly Thr Glu His Phe Pro Asn Glu
        195                 200                 205
Phe Thr Ser Gly Asp Gly Lys Lys Ala His Gln Asp Phe Gly Tyr Phe
    210                 215                 220
Tyr Gly Ser Ser Tyr Val Ala Ala Pro Asp Ser Ser Arg Thr Pro Gly
225                 230                 235                 240
Leu Ser Arg Ser Arg Asp Gly Leu Leu Val Ala Lys Leu Asp Leu Asn
                245                 250                 255
Leu Cys Gln Gln Val Asn Asp Val Trp Asn Phe Lys Met Thr Gly Arg
            260                 265                 270
Tyr Glu Met Tyr Ala Arg Glu Leu Ala Glu Ala Val Lys Ser Asn Tyr
        275                 280                 285
Ser Pro Thr Ile Val Lys Glu
    290                 295
```

<210> 1161
<211> 1621
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1621)
<223> X = any amino acid or stop code

<400> 1161

```
Met Ala Lys Ser Gly Gly Cys Gly Ala Gly Ala Gly Val Gly Gly Gly
 1               5                  10                  15
Asn Gly Ala Leu Thr Trp Val Asn Asn Ala Ala Lys Lys Glu Glu Ser
            20                  25                  30
Glu Thr Ala Asn Lys Asn Asp Ser Ser Lys Lys Leu Ser Val Glu Arg
        35                  40                  45
Val Tyr Gln Lys Lys Thr Gln Leu Glu His Ile Leu Leu Arg Pro Asp
    50                  55                  60
Thr Tyr Ile Gly Ser Val Glu Pro Leu Thr Gln Phe Met Trp Val Tyr
65                  70                  75                  80
Asp Glu Asp Val Gly Met Asn Cys Arg Glu Val Thr Phe Val Pro Gly
                85                  90                  95
Leu Tyr Lys Ile Phe Asp Glu Ile Leu Val Asn Ala Ala Asp Asn Lys
            100                 105                 110
Gln Arg Asp Lys Asn Met Thr Cys Ile Lys Val Ser Ile Asp Pro Glu
        115                 120                 125
Ser Asn Ile Ile Ser Ile Trp Asn Asn Gly Lys Gly Ile Pro Val Val
    130                 135                 140
Glu His Lys Val Glu Lys Val Tyr Val Pro Ala Leu Ile Phe Gly Gln
145                 150                 155                 160
Leu Leu Thr Ser Ser Asn Tyr Asp Asp Asp Glu Lys Lys Val Thr Gly
                165                 170                 175
Gly Arg Asn Gly Tyr Gly Ala Lys Leu Cys Asn Ile Phe Ser Thr Lys
            180                 185                 190
Phe Thr Val Glu Thr Ala Cys Lys Glu Tyr Lys His Ser Phe Lys Gln
        195                 200                 205
Thr Trp Met Asn Asn Met Met Lys Thr Ser Glu Ala Lys Ile Lys His
    210                 215                 220
Phe Asp Gly Glu Asp Tyr Thr Cys Ile Thr Phe Gln Pro Asp Leu Ser
225                 230                 235                 240
Lys Phe Lys Met Glu Lys Leu Asp Lys Asp Ile Val Ala Leu Met Thr
                245                 250                 255
Arg Arg Ala Tyr Asp Leu Ala Gly Ser Cys Arg Gly Val Lys Val Met
            260                 265                 270
Phe Asn Gly Lys Lys Leu Pro Val Asn Gly Phe Arg Ser Tyr Val Asp
        275                 280                 285
Leu Tyr Val Lys Asp Lys Leu Asp Glu Thr Gly Val Ala Leu Lys Val
    290                 295                 300
Ile His Glu Leu Ala Asn Glu Arg Trp Asp Val Cys Leu Thr Leu Ser
305                 310                 315                 320
Glu Lys Gly Phe Gln Gln Ile Ser Phe Val Asn Ser Ile Ala Thr Thr
                325                 330                 335
Lys Gly Gly Arg His Val Asp Tyr Val Val Asp Gln Val Val Gly Lys
            340                 345                 350
Leu Ile Glu Val Val Lys Lys Lys Asn Lys Ala Gly Val Ser Val Lys
        355                 360                 365
Pro Phe Gln Val Lys Asn His Ile Trp Val Phe Ile Asn Cys Leu Ile
    370                 375                 380
Glu Asn Pro Thr Phe Asp Ser Gln Thr Lys Glu Asn Met Thr Leu Gln
385                 390                 395                 400
Pro Lys Ser Phe Gly Ser Lys Cys Gln Leu Ser Glu Lys Phe Phe Lys
                405                 410                 415
Ala Ala Ser Asn Cys Gly Ile Val Glu Ser Ile Leu Asn Trp Val Lys
            420                 425                 430
Phe Lys Ala Gln Thr Gln Leu Asn Lys Lys Cys Ser Ser Val Lys Tyr
        435                 440                 445
Ser Lys Ile Lys Gly Ile Pro Lys Leu Asp Asp Ala Asn Asp Ala Gly
    450                 455                 460
Gly Lys His Ser Leu Glu Cys Thr Leu Ile Leu Thr Glu Gly Asp Ser
465                 470                 475                 480
Ala Lys Ser Leu Ala Val Ser Gly Leu Gly Val Ile Gly Arg Asp Arg
                485                 490                 495
Tyr Gly Val Phe Pro Leu Arg Gly Lys Ile Leu Asn Val Arg Glu Ala
```

```
            500                 505                 510
Ser His Lys Gln Ile Met Glu Asn Ala Glu Ile Asn Asn Ile Ile Lys
        515                 520                 525
Ile Val Gly Leu Gln Tyr Lys Lys Ser Tyr Asp Asp Ala Gln Ser Leu
    530                 535                 540
Lys Thr Leu Arg Tyr Gly Lys Ile Met Ile Met Thr Asp Gln Asp Gln
545                 550                 555                 560
Asp Gly Ser His Ile Lys Gly Leu Leu Ile Asn Phe Ile His His Asn
                565                 570                 575
Trp Pro Ser Leu Leu Lys His Gly Phe Leu Glu Glu Phe Ile Thr Pro
            580                 585                 590
Ile Val Lys Ala Ser Lys Asn Lys Gln Glu Leu Ser Phe Tyr Ser Ile
        595                 600                 605
Pro Glu Phe Asp Glu Trp Lys Lys His Ile Glu Asn Gln Lys Ala Trp
    610                 615                 620
Lys Ile Lys Tyr Tyr Lys Gly Leu Gly Thr Ser Thr Ala Lys Glu Ala
625                 630                 635                 640
Lys Glu Tyr Phe Ala Asp Met Glu Arg His Arg Ile Leu Phe Arg Tyr
                645                 650                 655
Ala Gly Pro Glu Asp Asp Ala Ala Ile Thr Leu Ala Phe Ser Lys Lys
            660                 665                 670
Lys Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn Phe Met Glu Asp Arg
        675                 680                 685
Arg Gln Arg Arg Leu His Gly Leu Pro Glu Gln Phe Leu Tyr Gly Thr
    690                 695                 700
Ala Thr Lys His Leu Thr Tyr Asn Asp Phe Ile Asn Lys Glu Leu Ile
705                 710                 715                 720
Leu Phe Ser Asn Ser Asp Asn Glu Arg Ser Ile Pro Ser Leu Val Asp
                725                 730                 735
Gly Phe Lys Pro Gly Gln Arg Lys Val Leu Phe Thr Cys Phe Lys Arg
            740                 745                 750
Asn Asp Lys Arg Glu Val Lys Val Ala Gln Leu Ala Gly Ser Val Ala
        755                 760                 765
Glu Met Ser Ala Tyr His His Gly Glu Gln Ala Leu Met Met Thr Ile
    770                 775                 780
Val Asn Leu Ala Gln Asn Phe Val Gly Ser Asn Asn Ile Asn Leu Leu
785                 790                 795                 800
Gln Pro Ile Gly Gln Phe Gly Thr Arg Leu His Gly Gly Lys Asp Ala
                805                 810                 815
Ala Ser Pro Arg Tyr Ile Phe Thr Met Leu Ser Thr Leu Ala Arg Leu
            820                 825                 830
Leu Phe Pro Ala Val Asp Asp Asn Leu Leu Lys Phe Leu Tyr Asp Asp
        835                 840                 845
Asn Gln Arg Val Glu Pro Glu Trp Tyr Ile Pro Ile Ile Pro Met Val
    850                 855                 860
Leu Ile Asn Gly Ala Glu Gly Ile Gly Thr Gly Trp Ala Cys Lys Leu
865                 870                 875                 880
Pro Asn Tyr Asp Ala Arg Glu Ile Val Asn Asn Val Arg Arg Met Leu
                885                 890                 895
Asp Gly Leu Asp Pro His Pro Met Leu Pro Asn Tyr Lys Asn Phe Lys
            900                 905                 910
Gly Thr Ile Gln Glu Leu Gly Gln Asn Gln Tyr Ala Val Ser Gly Glu
        915                 920                 925
Ile Phe Val Val Asp Arg Asn Thr Val Glu Ile Thr Glu Leu Pro Val
    930                 935                 940
Arg Thr Trp Thr Gln Val Tyr Lys Glu Gln Val Leu Glu Pro Met Leu
945                 950                 955                 960
Asn Gly Thr Asp Lys Thr Pro Ala Leu Ile Ser Asp Tyr Lys Glu Tyr
                965                 970                 975
His Thr Asp Thr Thr Val Lys Phe Val Val Lys Met Thr Glu Glu Lys
            980                 985                 990
Leu Ala Gln Ala Glu Ala Ala Gly Leu His Lys Val Phe Lys Leu Gln
        995                1000                1005
Thr Thr Leu Thr Cys Asn Ser Met Val Leu Phe Asp His Met Gly Cys
```

```
    1010                1015                1020
 Leu Lys Lys Tyr Glu Thr Val Gln Asp Ile Leu Lys Glu Phe Phe Asp
1025                1030                1035                1040
 Leu Arg Leu Ser Tyr Tyr Gly Leu Arg Lys Glu Trp Leu Val Gly Met
                1045                1050                1055
 Leu Gly Ala Glu Phe Thr Lys Leu Asn Asn Gln Ala Arg Phe Ile Leu
            1060                1065                1070
 Glu Lys Ile Gln Gly Lys Ile Thr Ile Xaa Asn Arg Ser Lys Lys Asp
        1075                1080                1085
 Leu Ile Gln Met Leu Val Gln Arg Gly Tyr Glu Ser Asp Pro Val Lys
    1090                1095                1100
 Ala Trp Lys Glu Ala Gln Glu Lys Ala Ala Glu Glu Asp Glu Thr Gln
1105                1110                1115                1120
 Asn Gln His Asp Asp Ser Ser Ser Asp Ser Gly Thr Pro Ser Gly Pro
                1125                1130                1135
 Asp Phe Asn Tyr Ile Leu Asn Met Ser Leu Trp Ser Leu Thr Lys Glu
            1140                1145                1150
 Lys Val Glu Glu Leu Ile Lys Gln Arg Asp Ala Lys Gly Arg Glu Val
        1155                1160                1165
 Asn Asp Leu Lys Arg Lys Ser Pro Ser Asp Leu Trp Lys Glu Asp Leu
    1170                1175                1180
 Ala Ala Phe Val Glu Glu Leu Asp Lys Val Glu Ser Gln Glu Arg Glu
1185                1190                1195                1200
 Asp Val Leu Ala Gly Met Ser Gly Lys Ala Ile Lys Gly Lys Val Gly
                1205                1210                1215
 Lys Pro Lys Val Lys Lys Leu Gln Leu Glu Glu Thr Met Pro Ser Pro
            1220                1225                1230
 Tyr Gly Arg Arg Ile Ile Pro Glu Ile Thr Ala Met Lys Ala Asp Ala
        1235                1240                1245
 Ser Lys Lys Leu Leu Lys Lys Lys Lys Gly Asp Leu Asp Thr Ala Ala
    1250                1255                1260
 Val Lys Val Glu Phe Asp Glu Glu Phe Ser Gly Ala Pro Val Glu Gly
1265                1270                1275                1280
 Ala Gly Glu Glu Ala Leu Thr Pro Ser Val Pro Ile Asn Lys Gly Pro
                1285                1290                1295
 Lys Pro Lys Arg Glu Lys Lys Glu Pro Gly Thr Arg Val Arg Lys Thr
            1300                1305                1310
 Pro Thr Ser Ser Gly Lys Pro Ser Ala Lys Lys Val Lys Lys Arg Asn
        1315                1320                1325
 Pro Trp Ser Asp Asp Glu Ser Lys Ser Glu Ser Asp Leu Glu Glu Thr
    1330                1335                1340
 Glu Pro Val Val Ile Pro Arg Asp Ser Leu Leu Arg Arg Ala Ala Ala
1345                1350                1355                1360
 Glu Arg Pro Lys Tyr Thr Phe Asp Phe Ser Glu Glu Glu Asp Asp Asp
                1365                1370                1375
 Ala Asp Asp Asp Asp Asp Asp Asn Asn Asp Leu Glu Glu Leu Lys Val
            1380                1385                1390
 Lys Ala Ser Pro Ile Thr Asn Asp Gly Glu Asp Glu Phe Val Pro Ser
        1395                1400                1405
 Asp Gly Leu Asp Lys Asp Glu Tyr Thr Phe Ser Pro Gly Lys Ser Lys
    1410                1415                1420
 Ala Thr Pro Glu Lys Ser Leu His Asp Lys Lys Ser Gln Asp Phe Gly
1425                1430                1435                1440
 Asn Leu Phe Ser Phe Pro Ser Tyr Ser Gln Lys Ser Glu Asp Asp Ser
                1445                1450                1455
 Ala Lys Phe Asp Ser Asn Glu Glu Asp Ser Ala Ser Val Phe Ser Pro
            1460                1465                1470
 Ser Phe Gly Leu Lys Gln Thr Asp Lys Val Pro Ser Lys Thr Val Ala
        1475                1480                1485
 Ala Lys Lys Gly Lys Pro Ser Ser Asp Thr Val Pro Lys Pro Lys Arg
    1490                1495                1500
 Ala Pro Lys Gln Lys Lys Val Val Glu Ala Val Asn Ser Asp Ser Asp
1505                1510                1515                1520
 Ser Glu Phe Gly Ile Pro Lys Lys Thr Thr Thr Pro Lys Gly Lys Gly
```

```
                1525                1530                1535
Arg Gly Ala Lys Lys Arg Lys Ala Ser Gly Ser Glu Asn Glu Gly Asp
            1540                1545                1550
Tyr Asn Pro Gly Arg Lys Thr Ser Lys Thr Thr Ser Lys Lys Pro Lys
        1555                1560                1565
Lys Thr Ser Phe Asp Gln Asp Ser Asp Val Asp Ile Phe Pro Ser Asp
    1570                1575                1580
Phe Pro Thr Glu Pro Pro Ser Leu Pro Arg Thr Gly Arg Ala Arg Lys
1585                1590                1595                1600
Glu Val Lys Tyr Phe Ala Glu Ser Asp Glu Glu Glu Asp Asp Val Asp
                1605                1610                1615
Phe Ala Met Phe Asn
            16201621
```

<210> 1162
<211> 73
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(73)
<223> X = any amino acid or stop code

<400> 1162

```
Lys Gly Cys Leu Ala Ala Ser Phe Asn Cys Ile Phe Leu Tyr Thr Gly
  1               5                  10                  15
Glu Leu Tyr Pro Thr Met Ile Arg Xaa Val Glu Ala Xaa Trp Glu Asn
             20                  25                  30
Asp Ser Leu Phe Leu Gly Lys Asp Ile Leu Leu Cys Thr Gly Gln Thr
         35                  40                  45
Pro Glu Leu Asn Gln Val His Pro Ser Pro Lys Ala Pro Pro Asn Thr
     50                  55                  60
His His Cys Lys Ala His Ser Ser His
 65                  70          73
```

<210> 1163
<211> 336
<212>Amino acid
<213> Homo sapiens

<400> 1163

```
Glu Asn Ser Phe Glu Cys Lys Asp Cys Gly Lys Ala Phe Ser Arg Gly
  1               5                  10                  15
Tyr Gln Leu Ser His His Gln Lys Ile His Thr Gly Glu Lys Pro Tyr
             20                  25                  30
Glu Cys Lys Glu Cys Lys Lys Ala Phe Arg Trp Gly Asn Gln Leu Thr
         35                  40                  45
Gln His Gln Lys Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Asp
     50                  55                  60
Cys Gly Lys Ala Phe Arg Trp Gly Ser Ser Leu Val Ile His Lys Arg
 65                  70                  75                  80
Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Asp Cys Gly Lys Ala
                 85                  90                  95
```

```
Phe Arg Arg Gly Asp Glu Leu Thr Gln His Gln Arg Phe His Thr Gly
            100                 105                 110
Glu Lys Asp Tyr Glu Cys Lys Asp Cys Gly Lys Thr Phe Ser Arg Val
        115                 120                 125
Tyr Lys Leu Ile Gln His Lys Arg Ile His Ser Gly Glu Lys Pro Tyr
    130                 135                 140
Glu Cys Lys Asp Cys Gly Lys Ala Phe Ile Cys Gly Ser Ser Leu Ile
145                 150                 155                 160
Gln His Lys Arg Ile His Thr Gly Glu Lys Pro Tyr Glu Cys Gln Glu
                165                 170                 175
Cys Gly Lys Ala Phe Thr Arg Val Asn Tyr Leu Thr Gln His Gln Lys
            180                 185                 190
Ile His Thr Gly Glu Lys Pro His Glu Cys Lys Glu Cys Gly Lys Ala
        195                 200                 205
Phe Arg Trp Gly Ser Ser Leu Val Lys His Glu Arg Ile His Thr Gly
    210                 215                 220
Glu Lys Pro Tyr Lys Cys Thr Glu Cys Gly Lys Ala Phe Asn Cys Gly
225                 230                 235                 240
Tyr His Leu Thr Gln His Glu Arg Ile His Thr Gly Glu Thr Pro Tyr
                245                 250                 255
Lys Cys Lys Glu Cys Gly Lys Ala Phe Ile Tyr Gly Ser Ser Leu Val
            260                 265                 270
Lys His Glu Arg Ile His Thr Gly Val Lys Pro Tyr Gly Cys Thr Glu
        275                 280                 285
Cys Gly Lys Ser Phe Ser His Gly His Gln Leu Thr Gln His Gln Lys
    290                 295                 300
Thr His Ser Gly Ala Lys Ser Tyr Glu Cys Lys Glu Cys Gly Lys Ala
305                 310                 315                 320
Cys Asn His Leu Asn His Leu Arg Glu His Gln Arg Ile His Asn Ser
                325                 330                 335 336
```

<210> 1164
<211> 118
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(118)
<223> X = any amino acid or stop code

<400> 1164

```
His Gln Tyr Leu Asp Asp Leu Tyr Pro Leu His Val Met Thr Ile Leu
  1               5                  10                  15
Leu Lys Ser His Phe Phe Thr Met Leu Lys Arg Pro Val Gly Ser Ser
            20                  25                  30
Ser Phe Ala Ser Leu Pro Phe Tyr His Gln Ser Ile Leu Leu Arg Lys
        35                  40                  45
Asn Gln Met Lys Arg Lys Lys Thr Gln Gln Asp Leu Thr His Ile Asn
    50                  55                  60
Trp Thr Leu Gln Ala Val Ser Ile Gln Thr Cys Ile Trp Leu Gln Lys
65                  70                  75                  80
Lys Pro Ser Ser Tyr Phe His Gln Leu Pro Asn Gln Val Leu Xaa Pro
                85                  90                  95
Glu Asn Ser Gly Pro Glu Ser Cys Leu Tyr Asp Leu Ala Ala Val Val
            100                 105                 110
Val His His Gly Ser Gly
```

115 118

<210> 1165
<211> 146
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(146)
<223> X = any amino acid or stop code

<400> 1165
Xaa Leu Asp Pro Asp Thr Leu Pro Ala Val Ala Thr Leu Leu Met Asp
1 5 10 15
Val Met Phe Tyr Ser Asn Gly Val Lys Asp Pro Met Ala Thr Gly Asp
20 25 30
Asp Cys Gly His Ile Arg Phe Phe Ser Phe Ser Leu Ile Glu Gly Tyr
35 40 45
Ile Ser Leu Val Met Asp Val Gln Thr Gln Gln Arg Phe Pro Ser Asn
50 55 60
Leu Leu Phe Thr Ser Ala Ser Gly Glu Leu Trp Lys Met Val Arg Ile
65 70 75 80
Gly Gly Gln Pro Leu Gly Phe Gly Pro Val Trp Glu Ser Gly Pro Thr
85 90 95
Gly Pro Thr Ser Pro Leu Ile Leu Pro Val Thr Pro Ser Ser Ser His
100 105 110
Arg Gln Ala Ala Ser Gln Val Thr Thr Thr Lys Gln Gly Gln Trp Leu
115 120 125
Cys Leu Lys Arg Pro Ser Ala Arg Ser Pro Asp His Thr Ala Cys Leu
130 135 140
Gly *
145

<210> 1166
<211> 84
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(84)
<223> X = any amino acid or stop code

<400> 1166
Glu Ala Pro Leu Thr Ser Val Cys Phe Ser Leu Glu Arg Arg Phe Gly
1 5 10 15
Ser Ser Ser Asn Thr Thr Ser Phe Gly Thr Leu Ala Ser Gln Asn Ala
20 25 30
Pro Thr Phe Gly Ser Leu Ser Gln Gln Thr Ser Gly Phe Gly Thr Gln
35 40 45
Ser Ser Gly Phe Ser Gly Phe Gly Ser Gly Thr Gly Gly Phe Ser Phe
50 55 60
Gly Ser Asn Asn Ser Xaa Val Ser Pro Phe Leu Ser Leu Thr Leu Ile

65 70 75 80
Lys Ser Ile Lys
84

<210> 1167
<211> 112
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(112)
<223> X = any amino acid or stop code

<400> 1167
Glu Glu Pro Gln Gly Ser Pro Ile Trp Val Trp Leu Ala Gly Ser Leu
1 5 10 15
Thr Ser Val Ser Cys Phe Leu Pro Phe Gln Arg Met Arg Ile Lys Pro
20 25 30
His Gln Gly Gln Tyr Ile Gly Glu Met Ser Phe Leu Gln His His Lys
35 40 45
Gly Glu Cys Arg Pro Gln Lys Asp Xaa Ala Arg Gln Glu Asn Pro Cys
50 55 60
Gly Pro Cys Ser Glu Arg Arg Lys His Leu Leu Gly Gln Asp Pro Lys
65 70 75 80
Thr Cys Lys Cys Ser Cys Lys Asn Thr Asp Ser Arg Cys Lys Ala Arg
85 90 95
Pro Leu Glu Leu Asn Glu Arg Thr Cys Arg Cys Asp Lys Pro Arg Arg
100 105 110 112

<210> 1168
<211> 319
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(319)
<223> X = any amino acid or stop code

<400> 1168
Thr Leu Trp Ala Gly Pro Gly Leu Cys Pro Gln Ser His Ser Ser Ser
1 5 10 15
Ser Val Pro Ala Pro Trp Glu Pro His Val Glu Arg Ala Leu Arg Thr
20 25 30
Asp Arg Asn Gln Gly Gln Arg Pro Leu Leu Ser Ala Ser Trp Ala Pro
35 40 45
Ala Pro Ala Arg Pro Leu Phe Leu Thr Ser Pro Val Leu Leu Pro Lys
50 55 60
Ser Arg Ala Ile Pro Ala Ala Arg Asp Pro Ser Xaa Ala Gly Ile Phe
65 70 75 80
Cys Leu Leu Glu Met Ala Gly Gly Gln Ala Ser Val Val Ile Ile Gly

```
                 85                  90                  95
Ser Ala Gly Val Leu Gly Cys Arg Trp Gly Ser Ser Gly Lys Ser His
            100                 105                 110
Ser Leu Ser Pro Ser Arg Lys Gly Asn Leu His Leu Leu Ser Gln Glu
        115                 120                 125
Pro Gln Thr Thr Val Val His Asn Ala Thr Asp Gly Ile Lys Gly Ser
    130                 135                 140
Thr Glu Ser Cys Asn Thr Thr Thr Glu Asp Glu Asp Leu Lys Val Arg
145                 150                 155                 160
Lys Gln Glu Ile Ile Lys Ile Thr Glu Gln Leu Ile Glu Ala Ile Asn
                165                 170                 175
Asn Gly Asp Phe Glu Ala Tyr Thr Lys Ile Cys Asp Pro Gly Leu Thr
            180                 185                 190
Ser Phe Glu Pro Glu Ala Leu Gly Asn Leu Val Glu Gly Met Asp Phe
        195                 200                 205
His Lys Phe Tyr Phe Glu Asn Arg Glu Trp Val Arg Ala Ala Asp Ile
    210                 215                 220
Leu Leu Pro Ala Pro Leu Pro Leu Cys Leu Cys Leu Leu Leu Thr Phe
225                 230                 235                 240
Ser Ser Gln Leu Pro Thr Phe Pro Leu Phe Asp Leu Arg Ala Ala Leu
                245                 250                 255
Leu Leu Cys Met Leu Val Pro Leu Cys Pro Asp Gly Cys Arg Gln Ala
            260                 265                 270
Pro Leu Lys Ala Leu Leu Leu Ser Ser Lys Cys His Ser Phe Cys Ser
        275                 280                 285
Cys Phe Val Ala Val Pro Val Thr Thr Ile Lys Leu Thr Tyr Phe Leu
    290                 295                 300
Pro Gly Ala Val Ala Tyr Ala Cys Asn Pro Asn Thr Leu Gly Gly
305                 310                 315                 319
```

<210> 1169
<211> 96
<212>Amino acid
<213> Homo sapiens

<400> 1169

```
Glu Arg Ala Gly Ala Gly Gly Ala Ala Ala Cys Arg Ala Gly Thr Arg
  1                 5                  10                  15
Ser Gly Ala Thr Ser Arg Thr Pro Trp Pro Leu His Arg Gln Leu Ser
             20                  25                  30
Met Met Leu Met Leu Ala Gln Ser Asn Pro Gln Leu Phe Ala Leu Met
         35                  40                  45
Gly Thr Arg Ala Gly Ile Ala Arg Glu Leu Glu Arg Val Glu Gln Gln
     50                  55                  60
Ser Arg Leu Glu Gln Leu Ser Ala Ala Glu Leu Gln Ser Arg Asn Gln
 65                  70                  75                  80
Gly His Trp Ala Asp Trp Leu Gln Ala Tyr Arg Ala Arg Leu Gly Gln
                 85                  90                  95  96
```

<210> 1170
<211> 145
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(145)
<223> X = any amino acid or stop code

<400> 1170

```
Asn Gly Thr Leu Phe Ile Met Val Met His Ile Lys Asp Leu Val Ser
 1               5                  10                  15
Asp Tyr Lys Glu Xaa Trp Leu Xaa Arg Lys Pro Leu Pro Trp Xaa Glu
            20                  25                  30
Ala Leu Leu Leu Arg Asp Cys Phe Phe Phe Xaa Val Thr Glu Asn Gly
        35                  40                  45
Ala Asp Pro Asn Pro Tyr Val Lys Thr Tyr Leu Leu Pro Asp Asn His
    50                  55                  60
Lys Thr Ser Lys Arg Lys Thr Lys Ile Ser Arg Lys Thr Arg Asn Pro
65                  70                  75                  80
Thr Phe Asn Glu Met Leu Val Tyr Ser Gly Tyr Ser Lys Glu Thr Leu
                85                  90                  95
Arg Gln Arg Glu Leu Gln Leu Ser Val Leu Ser Ala Glu Ser Leu Arg
            100                 105                 110
Glu Asn Phe Phe Leu Gly Gly Val Thr Leu Pro Leu Lys Asp Phe Asn
        115                 120                 125
Leu Ser Lys Glu Thr Val Lys Trp Tyr Gln Leu Thr Ala Ala Thr Tyr
    130                 135                 140
Leu
145
```

<210> 1171
<211> 464
<212>Amino acid
<213> Homo sapiens

<400> 1171

```
Leu His Arg Ile Met Gln Leu Ala Val Val Val Ser Gln Val Leu Glu
 1               5                  10                  15
Asn Gly Ser Ser Val Leu Val Cys Leu Glu Glu Gly Trp Asp Ile Thr
            20                  25                  30
Ala Gln Val Thr Ser Leu Val Gln Leu Leu Ser Asp Pro Phe Tyr Arg
        35                  40                  45
Thr Leu Glu Gly Phe Gln Met Leu Val Glu Lys Glu Trp Leu Ser Phe
    50                  55                  60
Gly His Lys Phe Ser Gln Arg Ser Ser Leu Thr Leu Asn Cys Gln Gly
65                  70                  75                  80
Ser Gly Phe Ala Pro Val Phe Leu Gln Phe Leu Asp Cys Val His Gln
                85                  90                  95
Val His Asn Gln Tyr Pro Thr Glu Phe Glu Phe Asn Leu Tyr Tyr Leu
            100                 105                 110
Lys Phe Leu Ala Phe His Tyr Val Ser Asn Arg Phe Lys Thr Phe Leu
        115                 120                 125
Leu Asp Ser Asp Tyr Glu Arg Leu Glu His Gly Thr Leu Phe Asp Asp
    130                 135                 140
Lys Gly Glu Lys His Ala Lys Lys Gly Val Cys Ile Trp Glu Cys Ile
145                 150                 155                 160
Asp Arg Met His Lys Arg Ser Pro Ile Phe Phe Asn Tyr Leu Tyr Ser
                165                 170                 175
Pro Leu Glu Ile Glu Ala Leu Lys Pro Asn Val Asn Val Ser Ser Leu
            180                 185                 190
```

```
Lys Lys Trp Asp Tyr Tyr Ile Glu Glu Thr Leu Ser Thr Gly Pro Ser
        195                 200                 205
Tyr Asp Trp Met Met Leu Thr Pro Lys His Phe Pro Ser Glu Asp Ser
    210                 215                 220
Asp Leu Ala Gly Glu Ala Gly Pro Arg Ser Gln Arg Arg Thr Val Trp
225                 230                 235                 240
Pro Cys Tyr Asp Asp Val Ser Cys Thr Gln Pro Asp Ala Leu Thr Ser
                245                 250                 255
Leu Phe Ser Glu Ile Glu Lys Leu Glu His Lys Leu Asn Gln Ala Pro
            260                 265                 270
Glu Lys Trp Gln Gln Leu Trp Glu Arg Val Thr Val Asp Leu Lys Glu
        275                 280                 285
Glu Pro Arg Thr Asp Arg Ser Gln Arg His Leu Ser Arg Ser Pro Gly
    290                 295                 300
Ile Val Ser Thr Asn Leu Pro Ser Tyr Gln Lys Arg Ser Leu Leu His
305                 310                 315                 320
Leu Pro Asp Ser Ser Met Gly Glu Glu Gln Asn Ser Ser Ile Ser Pro
                325                 330                 335
Ser Asn Gly Val Glu Arg Arg Ala Ala Thr Leu Tyr Ser Gln Tyr Thr
            340                 345                 350
Ser Lys Asn Asp Glu Asn Arg Ser Phe Glu Gly Thr Leu Tyr Lys Arg
        355                 360                 365
Gly Ala Leu Leu Lys Gly Trp Lys Pro Arg Trp Phe Val Leu Asp Val
    370                 375                 380
Thr Lys His Gln Leu Arg Tyr Tyr Asp Ser Gly Glu Asp Thr Ser Cys
385                 390                 395                 400
Lys Gly His Ile Asp Leu Ala Glu Val Glu Met Val Ile Pro Ala Gly
                405                 410                 415
Pro Ser Met Gly Ala Pro Lys His Thr Ser Asp Lys Ala Phe Phe Asp
            420                 425                 430
Leu Lys Thr Ser Lys Arg Val Tyr Asn Phe Cys Ala Gln Asp Gly Gln
        435                 440                 445
Ser Ala Gln Gln Trp Met Asp Lys Ile Gln Ser Cys Ile Ser Asp Ala
    450                 455                 460                 464
```

<210> 1172
<211> 256
<212>Amino acid
<213> Homo sapiens

<400> 1172

```
Glu Val Glu Gly Pro Arg Arg Val Ser Pro Ala Pro Glu Thr Leu Gly
  1               5                  10                  15
Met Glu Glu Ser Val Val Arg Pro Ser Val Phe Val Val Asp Gly Gln
            20                  25                  30
Thr Asp Ile Pro Phe Thr Arg Leu Gly Arg Ser His Arg Arg Gln Ser
        35                  40                  45
Cys Ser Val Ala Arg Val Gly Leu Gly Leu Leu Leu Leu Leu Met Gly
    50                  55                  60
Ala Gly Leu Ala Val Gln Gly Trp Phe Leu Leu Gln Leu His Trp Arg
65                  70                  75                  80
Leu Gly Glu Met Val Thr Arg Leu Pro Asp Gly Pro Ala Gly Ser Trp
                85                  90                  95
Glu Gln Leu Ile Gln Glu Arg Arg Ser His Glu Val Asn Pro Ala Ala
            100                 105                 110
His Leu Thr Gly Ala Asn Ser Ser Leu Thr Gly Ser Gly Gly Pro Leu
        115                 120                 125
```

```
Leu Trp Glu Thr Gln Leu Gly Leu Ala Phe Leu Arg Gly Leu Ser Tyr
    130                 135                 140
His Asp Gly Ala Leu Val Val Thr Lys Ala Gly Tyr Tyr Tyr Ile Tyr
145                 150                 155                 160
Ser Lys Val Gln Leu Gly Gly Val Gly Cys Pro Leu Gly Leu Ala Ser
                165                 170                 175
Thr Ile Thr His Gly Leu Tyr Lys Arg Thr Pro Arg Tyr Pro Glu Glu
            180                 185                 190
Leu Glu Leu Leu Val Ser Gln Gln Ser Pro Cys Gly Arg Ala Thr Ser
        195                 200                 205
Ser Ser Arg Val Trp Trp Asp Ser Ser Phe Leu Gly Gly Val Val His
    210                 215                 220
Leu Glu Ala Gly Glu Glu Val Val Val Arg Val Leu Asp Glu Arg Leu
225                 230                 235                 240
Val Arg Leu Arg Asp Gly Thr Arg Ser Tyr Phe Gly Ala Phe Met Val
                245                 250                 255 256
```

<210> 1173
<211> 117
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(117)
<223> X = any amino acid or stop code

<400> 1173

```
Gln Ser Ala Glu Leu Gly Pro Arg Arg Arg Glu Gly Ser Arg Arg Pro
  1                 5                  10                  15
Ser Cys Thr Lys Ala Ser Lys Pro Trp Arg Arg Arg Pro Gly Gly Pro
            20                  25                  30
Thr Ser Gly Leu Gly Xaa Gly Pro Leu Ser Pro Gly Pro Tyr Gln Cys
        35                  40                  45
Arg Pro Ser Leu Pro Ala Gln Leu Tyr Pro Gln Ser Leu Met Ala Ala
    50                  55                  60
Ala Thr Leu Arg Thr Pro Thr Gln Val Ser Ala Ala Ser Ser Arg Pro
65                  70                  75                  80
His Thr Pro Ser Pro Thr His Val Leu Lys Pro Ser Val Arg Gly Ala
                85                  90                  95
Cys Ser Ser Pro Arg Cys Pro Gly Ser Gly Thr Leu Arg Arg Ser Trp
            100                 105                 110
Val Gly Pro Phe Phe
        115     117
```

<210> 1174
<211> 370
<212>Amino acid
<213> Homo sapiens

<400> 1174

```
Leu Trp Trp Pro Pro Leu Ser Arg His Ala Ala His Arg Gln Trp Pro
```

```
  1               5                  10                  15
Gly Pro Thr Ala Pro Arg Gly Leu Gly His Lys Val Lys Gly Arg Gly
            20                  25                  30
Ala Ser Pro Ala Ala Met Trp Ser Cys Ser Trp Phe Asn Gly Thr Gly
        35                  40                  45
Leu Val Glu Glu Leu Pro Ala Cys Gln Asp Leu Gln Leu Gly Leu Ser
    50                  55                  60
Leu Leu Ser Leu Leu Gly Leu Val Val Gly Val Pro Val Gly Leu Cys
65                  70                  75                  80
Tyr Asn Ala Leu Leu Val Leu Ala Asn Leu His Ser Lys Ala Ser Met
                85                  90                  95
Thr Met Pro Asp Val Tyr Phe Val Asn Met Ala Val Ala Gly Leu Val
            100                 105                 110
Leu Ser Ala Leu Ala Pro Val His Leu Leu Gly Pro Pro Ser Ser Arg
        115                 120                 125
Trp Ala Leu Trp Ser Val Gly Gly Glu Val His Val Ala Leu Gln Ile
    130                 135                 140
Pro Phe Asn Val Ser Ser Leu Val Ala Met Tyr Ser Thr Ala Leu Leu
145                 150                 155                 160
Ser Leu Asp His Tyr Ile Glu Arg Ala Leu Pro Arg Thr Tyr Met Ala
                165                 170                 175
Ser Val Tyr Asn Thr Arg His Val Cys Gly Phe Val Trp Gly Gly Ala
            180                 185                 190
Leu Leu Thr Ser Phe Ser Ser Leu Leu Phe Tyr Ile Cys Ser His Val
        195                 200                 205
Ser Thr Arg Ala Leu Glu Cys Ala Lys Met Gln Asn Ala Glu Ala Ala
    210                 215                 220
Asp Ala Thr Leu Val Phe Ile Gly Tyr Val Val Pro Ala Leu Ala Thr
225                 230                 235                 240
Leu Tyr Ala Leu Val Leu Leu Ser Arg Val Arg Arg Glu Asp Thr Pro
                245                 250                 255
Leu Asp Arg Asp Thr Gly Arg Leu Glu Pro Ser Ala His Arg Leu Leu
            260                 265                 270
Val Ala Thr Val Cys Thr Gln Phe Gly Leu Trp Thr Pro His Tyr Leu
        275                 280                 285
Ile Leu Leu Gly His Thr Val Ile Ile Ser Arg Gly Lys Pro Val Asp
    290                 295                 300
Ala His Tyr Leu Gly Leu Leu His Phe Val Lys Asp Phe Ser Lys Leu
305                 310                 315                 320
Leu Ala Phe Ser Ser Ser Phe Val Thr Pro Leu Leu Tyr Arg Tyr Met
                325                 330                 335
Asn Gln Ser Phe Pro Ser Lys Leu Gln Arg Leu Met Lys Lys Leu Pro
            340                 345                 350
Cys Gly Asp Arg His Cys Ser Pro Asp His Met Gly Val Gln Gln Val
        355                 360                 365
Leu Ala
    370
```

<210> 1175
<211> 145
<212>Amino acid
<213> Homo sapiens

<400> 1175

```
Ser Glu Ser Glu Leu Phe Thr Leu Met Pro Ser Leu Pro Thr Thr Asn
  1               5                  10                  15
Cys Val His Ser Leu Gln Met Ile Pro Pro Leu Ser Pro Ala Pro Asn
            20                  25                  30
Gln Glu Leu Val Leu Gly Leu Cys Tyr Met Ser Tyr Leu Ala Phe Leu
```

```
         35                  40                  45
Tyr Met Thr Phe Asp Phe Cys Cys Leu Tyr Phe Ser Thr Val Tyr Ala
     50                  55                  60
Pro Ser Phe Lys Tyr Ile Cys Val His Thr Asp Thr His Ile Cys Val
 65                  70                  75                  80
Cys Val Cys Ile Tyr Leu Ser Ser Val Val Ser Lys Ser Ser Ala Glu
                 85                  90                  95
Ala Asp Gly Val Leu Gln Pro Arg Arg His Pro Ala Ser Leu Leu Ile
            100                 105                 110
Val Phe Ala Thr Ser Ile Ser Glu Ser Ser Leu Leu Ile Phe Ser Phe
        115                 120                 125
Gln Lys Thr Glu Ala Lys Leu Ile Val Phe Ala Val Ser Leu Ala Ala
    130                 135                 140
Lys
145
```

<210> 1176
<211> 50
<212>Amino acid
<213> Homo sapiens

<400> 1176

```
Phe Phe Phe Leu Arg Gln Ser Leu Thr Leu Ser Pro Arg Leu Glu Cys
  1               5                  10                  15
Ser Gly Ala Thr Ser Ala Ser Pro Ser Ala Gly Ile Thr Gly Met Ser
            20                  25                  30
His His Ser Gln Pro Ile Val Asn Phe Leu Arg Ala Cys Ile Pro Ile
        35                  40                  45
Ser Lys
    50
```

<210> 1177
<211> 231
<212>Amino acid
<213> Homo sapiens

<400> 1177

```
Arg Gln His Ala Glu Glu Arg Gly Arg Arg Asn Pro Lys Thr Gly Leu
  1               5                  10                  15
Thr Leu Glu Arg Val Gly Pro Glu Ser Ser Pro Tyr Leu Leu Arg Arg
            20                  25                  30
His Gln Arg Gln Gly Gln Glu Gly Glu His Tyr His Ser Cys Val Gln
        35                  40                  45
Leu Ala Pro Thr Arg Gly Leu Glu Glu Ser Gly His Gly Pro Leu Ser
    50                  55                  60
Leu Ala Gly Gly Pro Arg Val Gly Gly Val Ala Ala Ala Ala Thr Glu
 65                  70                  75                  80
Ala Pro Arg Met Glu Trp Lys Val Lys Val Arg Ser Asp Gly Thr Arg
                 85                  90                  95
Tyr Val Ala Lys Arg Pro Val Arg Asp Arg Leu Leu Lys Ala Arg Ala
            100                 105                 110
Leu Lys Ile Arg Glu Glu Arg Ser Gly Met Thr Thr Asp Asp Asp Ala
        115                 120                 125
Val Ser Glu Met Lys Met Gly Arg Tyr Trp Ser Lys Glu Glu Arg Lys
```

```
    130                 135                 140
Gln His Leu Ile Arg Ala Arg Glu Gln Arg Lys Arg Arg Glu Phe Met
145                 150                 155                 160
Met Gln Ser Arg Leu Glu Cys Leu Arg Glu Gln Gln Asn Gly Asp Ser
                165                 170                 175
Lys Pro Glu Leu Asn Ile Ile Ala Leu Ser His Arg Lys Thr Met Lys
            180                 185                 190
Lys Arg Asn Lys Lys Ile Leu Asp Asn Trp Ile Thr Ile Gln Glu Met
        195                 200                 205
Leu Ala His Gly Ala Arg Ser Ala Asp Gly Lys Arg Val Tyr Asn Pro
    210                 215                 220
Leu Leu Ser Val Thr Thr Val
225                 230 231
```

<210> 1178
<211> 204
<212>Amino acid
<213> Homo sapiens

<400> 1178

```
Ser Asp Arg Gly Cys Ser Ala Ala Ala Gly Arg Asn Met Thr Ala Val
  1                 5                  10                  15
Gly Val Gln Ala Gln Arg Pro Leu Gly Gln Arg Gln Pro Arg Arg Ser
             20                  25                  30
Phe Phe Glu Ser Phe Ile Arg Thr Leu Ile Ile Thr Cys Val Ala Leu
         35                  40                  45
Ala Val Val Leu Ser Ser Val Ser Ile Cys Asp Gly His Trp Leu Leu
     50                  55                  60
Ala Glu Asp Arg Leu Phe Gly Leu Trp His Phe Cys Thr Thr Thr Asn
 65                  70                  75                  80
Gln Ser Val Pro Ile Cys Phe Arg Asp Leu Gly Gln Ala His Val Pro
                 85                  90                  95
Gly Leu Ala Val Gly Met Gly Leu Val Arg Ser Val Gly Ala Leu Ala
            100                 105                 110
Val Val Ala Ala Ile Phe Gly Leu Glu Phe Leu Met Val Ser Gln Leu
        115                 120                 125
Cys Glu Asp Lys His Ser Gln Cys Lys Trp Val Met Gly Ser Ile Leu
    130                 135                 140
Leu Leu Val Ser Phe Val Leu Ser Ser Gly Gly Leu Leu Gly Phe Val
145                 150                 155                 160
Ile Leu Leu Arg Asn Gln Val Thr Leu Ile Gly Phe Thr Leu Met Phe
                165                 170                 175
Trp Cys Glu Phe Thr Ala Ser Phe Leu Leu Phe Leu Asn Ala Ile Ser
            180                 185                 190
Gly Leu His Ile Asn Ser Ile Thr His Pro Trp Glu
        195                 200                 204
```

<210> 1179
<211> 179
<212>Amino acid
<213> Homo sapiens

<400> 1179

```
Gln Ile Leu Pro Asn Leu Tyr Leu Gly Ser Ala Arg Asp Ser Ala Asn
```

```
  1               5                  10                  15
Leu Glu Ser Leu Ala Lys Leu Gly Ile Arg Tyr Ile Leu Asn Val Thr
             20                  25                  30
Pro Asn Leu Pro Asn Phe Phe Glu Lys Asn Gly Asp Phe His Tyr Lys
         35                  40                  45
Gln Ile Pro Ile Ser Asp His Trp Ser Gln Asn Leu Ser Arg Phe Phe
     50                  55                  60
Pro Glu Ala Ile Glu Phe Ile Asp Glu Ala Leu Ser Gln Asn Cys Gly
 65                  70                  75                  80
Val Leu Val His Cys Leu Ala Gly Val Ser Arg Ser Val Thr Val Thr
                 85                  90                  95
Val Ala Tyr Leu Met Gln Lys Leu His Leu Ser Leu Asn Asp Ala Tyr
            100                 105                 110
Asp Leu Val Lys Arg Lys Lys Ser Asn Ile Ser Pro Asn Phe Asn Phe
        115                 120                 125
Met Gly Gln Leu Leu Asp Phe Glu Arg Ser Leu Arg Leu Glu Glu Arg
    130                 135                 140
His Ser Gln Glu Gln Gly Ser Gly Gly Gln Ala Ser Ala Ala Ser Asn
145                 150                 155                 160
Pro Pro Ser Phe Phe Thr Thr Pro Thr Ser Asp Gly Ala Phe Glu Leu
                165                 170                 175
Ala Pro Thr
        179
```

<210> 1180
<211> 159
<212>Amino acid
<213> Homo sapiens

<400> 1180

```
Arg Lys Ser Leu His Glu Asn Lys Leu Lys Arg Leu Gln Glu Lys Val
  1               5                  10                  15
Glu Val Leu Glu Ala Lys Lys Glu Glu Leu Glu Thr Glu Asn Gln Val
             20                  25                  30
Leu Asn Arg Gln Asn Val Pro Phe Glu Asp Tyr Thr Arg Leu Gln Lys
         35                  40                  45
Arg Leu Lys Asp Ile Gln Arg Arg His Asn Glu Phe Arg Ser Leu Ile
     50                  55                  60
Leu Val Pro Asn Met Pro Pro Thr Ala Ser Ile Asn Pro Val Ser Phe
 65                  70                  75                  80
Gln Ser Ser Ala Met Gly Ser Lys His Gly Thr Thr Ile Ser Ser Ser
                 85                  90                  95
Tyr Ala Gly Gly Thr Thr Ser Lys Gly Thr Leu Ser Thr Ser Gln Lys
            100                 105                 110
Thr Arg Arg Thr Gly Asn Asn Thr Lys Lys Thr Thr Arg Gly Thr Trp
        115                 120                 125
Ile Phe Arg Arg Met Met Phe Leu Glu Asn Arg Gln Ile Lys Arg Gly
    130                 135                 140
Glu Val Gly Asp Ser Val Lys Leu Asp Ile Leu Thr Cys Gly Ile
145                 150                 155             159
```

<210> 1181
<211> 328
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(328)
<223> X = any amino acid or stop code

<400> 1181

```
Gly Arg Pro Gly Ala Gly Ala Ser Glu Leu Phe Pro Ser Val Thr Thr
  1               5                  10                  15
Asp Leu Ser Val Ser Lys Gln Asn Ala Cys Leu Thr Cys Val Asp Phe
             20                  25                  30
Val Thr Val His Val Cys Met Gly Phe Trp Gly Ile Gly Pro Gly Ala
         35                  40                  45
Leu Ser Thr Ser Cys Ile Pro Tyr Pro Leu Ser His Gly Pro Gly Ser
     50                  55                  60
Val Lys Ala Glu Met Leu His Met Tyr Ser Gln Lys Asp Pro Leu Ile
 65                  70                  75                  80
Leu Cys Val Arg Leu Ala Val Leu Leu Ala Val Thr Leu Thr Val Pro
                 85                  90                  95
Val Val Leu Phe Pro Ile Arg Arg Ala Leu Gln Gln Leu Leu Phe Pro
            100                 105                 110
Gly Lys Ala Phe Ser Trp Pro Arg His Val Ala Ile Ala Leu Ile Leu
        115                 120                 125
Leu Val Leu Val Asn Val Leu Val Ile Cys Val Pro Thr Ile Arg Asp
    130                 135                 140
Ile Phe Gly Val Ile Gly Ser Thr Ser Ala Pro Ser Leu Ile Phe Ile
145                 150                 155                 160
Leu Pro Ser Ile Phe Tyr Leu Arg Ile Val Pro Ser Glu Val Glu Pro
                165                 170                 175
Phe Leu Ser Trp Pro Lys Ile Gln Ala Leu Cys Phe Gly Val Leu Gly
            180                 185                 190
Val Leu Phe Met Ala Val Ser Leu Gly Phe Met Phe Ala Asn Trp Ala
        195                 200                 205
Thr Gly Gln Ser Arg Met Ser Gly His Xaa Ser Gly Pro Ala Gly Pro
    210                 215                 220
Gly Pro Cys Ala His Ala His Gly Gly Val Arg Ala Ala Pro Xaa Gly
225                 230                 235                 240
Pro Ser Cys Pro Thr Cys Gly Gly Gly Trp Phe Pro Xaa Thr Trp Leu
                245                 250                 255
Ser Glu Ala Gly Asp Ser Arg Gly Cys Arg Leu Ala His Phe Pro Pro
            260                 265                 270
Pro Gln Gly Cys Gln Ala Trp Ile Met Ala Leu Ile Pro Thr Pro Thr
        275                 280                 285
Pro Trp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
    290                 295                 300
Glu Glu Glu Glu Glu Glu Ala Arg Ser Trp Trp Ser Leu Cys Pro Ala
305                 310                 315                 320
Gln Ser Ser Leu Pro Pro Pro Gly
                325                 328
```

<210> 1182
<211> 144
<212>Amino acid
<213> Homo sapiens

<400> 1182

```
Ile Asn Glu Leu Arg Tyr His Leu Glu Glu Ser Arg Asp Lys Asn Val
  1               5                  10                  15
```

```
Leu Leu Cys Leu Glu Glu Arg Asp Trp Asp Pro Gly Leu Ala Ile Ile
            20                  25                  30
Asp Asn Leu Met Gln Ser Ile Asn Gln Ser Lys Lys Thr Val Phe Val
        35                  40                  45
Leu Thr Lys Lys Tyr Ala Lys Ser Trp Asn Phe Lys Thr Ala Phe Tyr
    50                  55                  60
Leu Ala Leu Gln Arg Leu Met Asp Glu Asn Met Asp Val Ile Ile Phe
65                  70                  75                  80
Ile Leu Leu Glu Pro Val Leu Gln His Ser Gln Tyr Leu Arg Leu Arg
                85                  90                  95
Gln Arg Ile Cys Lys Ser Ser Ile Leu Gln Trp Pro Asp Asn Pro Lys
            100                 105                 110
Ala Glu Gly Leu Phe Trp Gln Thr Leu Arg Asn Val Val Leu Thr Glu
        115                 120                 125
Asn Asp Ser Arg Tyr Asn Asn Met Tyr Val Asp Ser Ile Lys Gln Tyr
    130                 135                 140                 144
```

<210> 1183
<211> 484
<212>Amino acid
<213> Homo sapiens

<400> 1183

```
Asp Asp Pro Ile Lys Thr Ser Trp Thr Pro Pro Arg Tyr Val Leu Ser
  1               5                  10                  15
Met Ser Glu Glu Arg His Glu Arg Val Arg Lys Lys Tyr His Ile Leu
            20                  25                  30
Val Glu Gly Asp Gly Ile Pro Pro Pro Ile Lys Ser Phe Lys Glu Met
        35                  40                  45
Lys Phe Pro Ala Ala Ile Leu Arg Gly Leu Lys Lys Lys Gly Ile His
    50                  55                  60
His Pro Thr Pro Ile Gln Ile Gln Gly Ile Pro Thr Ile Leu Ser Gly
65                  70                  75                  80
Arg Asp Met Ile Gly Ile Ala Phe Thr Gly Ser Gly Lys Thr Leu Val
                85                  90                  95
Phe Thr Leu Pro Val Ile Met Phe Cys Leu Glu Gln Glu Lys Arg Leu
            100                 105                 110
Pro Phe Ser Lys Arg Glu Gly Pro Tyr Gly Leu Ile Ile Cys Pro Ser
        115                 120                 125
Arg Glu Leu Ala Arg Gln Thr His Gly Ile Leu Glu Tyr Tyr Cys Arg
    130                 135                 140
Leu Leu Gln Glu Asp Ser Ser Pro Leu Leu Arg Cys Ala Leu Cys Ile
145                 150                 155                 160
Gly Gly Met Ser Val Lys Glu Gln Met Glu Thr Ile Arg His Gly Val
                165                 170                 175
His Met Met Val Ala Thr Pro Gly Arg Leu Met Asp Leu Leu Gln Lys
            180                 185                 190
Lys Met Val Ser Leu Asp Ile Cys Arg Tyr Leu Ala Leu Asp Glu Ala
        195                 200                 205
Asp Arg Met Ile Asp Met Gly Phe Glu Gly Asp Ile Arg Thr Ile Phe
    210                 215                 220
Ser Tyr Phe Lys Gly Gln Arg Gln Thr Leu Leu Phe Ser Ala Thr Met
225                 230                 235                 240
Pro Lys Lys Ile Gln Asn Phe Ala Lys Ser Ala Leu Val Lys Pro Val
                245                 250                 255
Thr Ile Asn Val Gly Arg Ala Gly Ala Ala Ser Leu Asp Val Ile Gln
            260                 265                 270
```

```
Glu Val Glu Tyr Val Lys Glu Glu Ala Lys Met Val Tyr Leu Leu Glu
        275                 280                 285
Cys Leu Gln Lys Thr Pro Pro Pro Val Leu Ile Phe Ala Glu Lys Lys
    290                 295                 300
Ala Asp Val Asp Ala Ile His Glu Tyr Leu Leu Leu Lys Gly Val Glu
305                 310                 315                 320
Ala Val Ala Ile His Gly Gly Lys Asp Gln Glu Glu Arg Thr Lys Ala
                325                 330                 335
Ile Glu Ala Phe Arg Glu Gly Lys Lys Asp Val Leu Val Ala Thr Asp
            340                 345                 350
Val Ala Ser Lys Gly Leu Asp Phe Pro Ala Ile Gln His Val Ile Asn
        355                 360                 365
Tyr Asp Met Pro Glu Glu Ile Glu Asn Tyr Val His Arg Ile Gly Arg
    370                 375                 380
Thr Gly Arg Ser Gly Asn Thr Gly Ile Ala Thr Thr Phe Ile Asn Lys
385                 390                 395                 400
Ala Cys Asp Glu Ser Val Leu Met Asp Leu Lys Ala Leu Leu Leu Glu
                405                 410                 415
Ala Lys Gln Lys Val Pro Pro Val Leu Gln Val Leu His Cys Gly Asp
            420                 425                 430
Glu Ser Met Leu Asp Ile Gly Gly Glu Arg Gly Cys Ala Phe Cys Gly
        435                 440                 445
Gly Leu Gly His Arg Ile Thr Asp Cys Pro Lys Leu Glu Ala Met Gln
    450                 455                 460
Thr Lys Gln Val Ser Asn Ile Gly Arg Lys Asp Tyr Leu Ala His Ser
465                 470                 475                 480
Ser Met Asp Phe
            484
```

<210> 1184
<211> 125
<212>Amino acid
<213> Homo sapiens

<400> 1184

```
Ile Glu Thr Thr Gln Pro Ser Glu Asp Thr Asn Ala Asn Ser Gln Asp
  1               5                  10                  15
Asn Ser Met Gln Pro Glu Thr Ser Ser Gln Gln Gln Leu Leu Ser Pro
            20                  25                  30
Thr Leu Ser Asp Arg Gly Gly Ser Arg Gln Asp Ala Ala Asp Ala Gly
        35                  40                  45
Lys Pro Gln Arg Lys Phe Gly Gln Trp Arg Leu Pro Ser Ala Pro Lys
    50                  55                  60
Pro Ile Ser His Ser Val Ser Ser Val Asn Leu Arg Phe Gly Gly Arg
65                  70                  75                  80
Thr Thr Met Lys Ser Val Val Cys Lys Met Asn Pro Met Thr Asp Ala
                85                  90                  95
Ala Ser Cys Gly Ser Glu Val Lys Lys Trp Trp Thr Arg Gln Leu Thr
            100                 105                 110
Val Glu Ser Asp Glu Ser Gly Asp Asp Leu Leu Asp Ile
        115                 120                 125
```

<210> 1185
<211> 73
<212>Amino acid
<213> Homo sapiens

<400> 1185
Asn Asp Arg Phe Ser Ala Cys Tyr Phe Thr Leu Lys Leu Lys Glu Ala
1 5 10 15
Ala Val Arg Gln Arg Glu Ala Leu Lys Lys Leu Thr Lys Asn Ile Ala
20 25 30
Thr Asp Ser Tyr Ile Ser Val Asn Leu Arg Asp Val Tyr Ala Arg Ser
35 40 45
Ile Met Glu Met Leu Arg Leu Lys Gly Arg Glu Arg Ala Ser Thr Arg
50 55 60
Ser Ser Gly Gly Asp Asp Phe Trp Phe
65 70 73

<210> 1186
<211> 343
<212>Amino acid
<213> Homo sapiens

<400> 1186
Phe Thr Val Phe Ile Leu Gly Ile Thr Ile Arg Pro Leu Val Glu Phe
1 5 10 15
Leu Asp Val Lys Arg Ser Asn Lys Lys Gln Gln Ala Val Ser Glu Glu
20 25 30
Ile Tyr Cys Arg Leu Phe Asp His Val Lys Thr Gly Ile Glu Asp Val
35 40 45
Cys Gly His Trp Gly His Asn Phe Trp Arg Asp Lys Phe Lys Lys Phe
50 55 60
Asp Asp Lys Tyr Leu Arg Lys Leu Leu Ile Arg Glu Asn Gln Pro Lys
65 70 75 80
Ser Ser Ile Val Ser Leu Tyr Lys Lys Leu Glu Ile Lys His Ala Ile
85 90 95
Glu Met Ala Glu Thr Gly Met Ile Ser Thr Val Pro Thr Phe Ala Ser
100 105 110
Leu Asn Asp Cys Arg Glu Glu Lys Ile Arg Lys Val Thr Ser Ser Glu
115 120 125
Thr Asp Glu Ile Arg Glu Leu Leu Ser Arg Asn Leu Tyr Gln Ile Arg
130 135 140
Gln Arg Thr Leu Ser Tyr Asn Arg His Ser Leu Thr Ala Asp Thr Ser
145 150 155 160
Glu Arg Gln Ala Lys Glu Ile Leu Ile Arg Arg Arg His Ser Leu Arg
165 170 175
Glu Ser Ile Arg Lys Asp Ser Ser Leu Asn Arg Glu His Arg Ala Ser
180 185 190
Thr Ser Thr Ser Arg Tyr Leu Ser Leu Pro Lys Asn Thr Lys Leu Pro
195 200 205
Glu Lys Leu Gln Lys Arg Arg Thr Ile Ser Ile Ala Asp Gly Asn Ser
210 215 220
Ser Asp Ser Asp Ala Asp Ala Gly Thr Thr Val Leu Asn Leu Gln Pro
225 230 235 240
Arg Ala Arg Arg Phe Leu Pro Glu Gln Phe Ser Lys Lys Ser Pro Gln
245 250 255
Ser Tyr Lys Met Glu Trp Lys Asn Glu Val Asp Val Asp Ser Gly Arg
260 265 270
Asp Met Pro Ser Thr Pro Pro Thr Pro His Ser Arg Glu Lys Gly Thr
275 280 285
Gln Thr Ser Gly Leu Leu Gln Gln Pro Leu Leu Ser Lys Asp Gln Ser
290 295 300

```
Gly Ser Glu Arg Glu Asp Ser Leu Thr Glu Gly Ile Pro Pro Lys Pro
305                 310                 315                 320
Pro Pro Arg Leu Val Trp Arg Ala Ser Glu Pro Gly Ser Arg Lys Ala
                325                 330                 335
Arg Phe Gly Ser Glu Lys Pro
            340         343
```

<210> 1187
<211> 146
<212>Amino acid
<213> Homo sapiens

<400> 1187

```
His Glu Glu Ala Ser Gly Leu Ser Val Trp Met Gly Lys Gln Met Glu
  1               5                  10                  15
Pro Leu His Ala Val Pro Pro Ala Ala Ile Thr Leu Ile Leu Ser Leu
            20                  25                  30
Leu Val Ala Val Phe Thr Glu Cys Thr Ser Asn Val Ala Thr Thr Thr
        35                  40                  45
Leu Phe Leu Pro Ile Phe Ala Ser Met Ser Arg Ser Ile Gly Leu Asn
    50                  55                  60
Pro Leu Tyr Ile Met Leu Pro Cys Thr Leu Ser Ala Ser Phe Ala Phe
65                  70                  75                  80
Met Leu Pro Val Ala Thr Pro Pro Asn Ala Ile Val Phe Thr Tyr Gly
                85                  90                  95
His Leu Lys Val Ala Asp Met Val Lys Thr Gly Val Ile Met Asn Ile
            100                 105                 110
Ile Gly Val Phe Cys Val Phe Leu Ala Val Asn Thr Trp Gly Arg Ala
        115                 120                 125
Ile Phe Asp Leu Asp His Phe Pro Asp Trp Ala Asn Val Thr His Ile
    130                 135                 140
Glu Thr
145 146
```

<210> 1188
<211> 40
<212>Amino acid
<213> Homo sapiens

<400> 1188

```
His Glu Leu Glu Asn Asn Trp Leu Gln His Glu Lys Ala Pro Thr Glu
  1               5                  10                  15
Glu Gly Lys Lys Glu Leu Leu Ala Leu Ser Asn Ala Asn Pro Ser Leu
            20                  25                  30
Leu Glu Arg His Cys Ala Tyr Leu
        35                  40
```

<210> 1189
<211> 62
<212>Amino acid
<213> Homo sapiens

<400> 1189

```
Gly Asn Ile Ile Tyr Met Tyr Met Gln Pro Gly Ala Arg Ser Ser Gln
 1               5                  10                  15
Asp Gln Gly Lys Phe Leu Thr Leu Phe Tyr Asn Ile Val Thr Pro Leu
            20                  25                  30
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Arg Glu Val Lys Gly Ala
        35                  40                  45
Leu Gly Arg Leu Leu Leu Gly Lys Arg Glu Leu Gly Lys Glu
    50                  55                  60      62
```

<210> 1190
<211> 623
<212>Amino acid
<213> Homo sapiens

<400> 1190

```
Pro Leu Glu Gln Arg Ser Asn Cys Arg Val Asp Pro Arg Val Arg Thr
 1               5                  10                  15
His Thr Met Ala Ser Asp Thr Ser Ser Leu Val Gln Ser His Thr Tyr
            20                  25                  30
Lys Lys Arg Glu Pro Ala Asp Val Pro Tyr Gln Thr Gly Gln Leu His
        35                  40                  45
Pro Ala Ile Arg Val Ala Asp Leu Leu Gln His Ile Thr Gln Met Lys
    50                  55                  60
Cys Ala Glu Gly Tyr Gly Phe Lys Glu Glu Tyr Glu Ser Phe Phe Glu
65                  70                  75                  80
Gly Gln Ser Ala Pro Trp Asp Ser Ala Lys Lys Asp Glu Asn Arg Met
                85                  90                  95
Lys Asn Arg Tyr Gly Asn Ile Ile Ala Tyr Asp His Ser Arg Val Arg
            100                 105                 110
Leu Gln Thr Ile Glu Gly Asp Thr Asn Ser Asp Tyr Ile Asn Gly Asn
        115                 120                 125
Tyr Ile Asp Gly Tyr His Arg Pro Asn His Tyr Ile Ala Thr Gln Gly
    130                 135                 140
Pro Met Gln Glu Thr Ile Tyr Asp Phe Trp Arg Met Val Trp His Glu
145                 150                 155                 160
Asn Thr Ala Ser Ile Ile Met Val Thr Asn Leu Val Glu Val Gly Arg
                165                 170                 175
Val Lys Cys Cys Lys Tyr Trp Pro Asp Asp Thr Glu Ile Tyr Lys Asp
            180                 185                 190
Ile Lys Val Thr Leu Ile Glu Thr Glu Leu Leu Ala Glu Tyr Val Ile
        195                 200                 205
Arg Thr Phe Ala Val Glu Lys Arg Gly Val His Glu Ile Arg Glu Ile
    210                 215                 220
Arg Gln Phe His Phe Thr Gly Trp Pro Asp His Gly Val Pro Tyr His
225                 230                 235                 240
Ala Thr Gly Leu Leu Gly Phe Val Arg Gln Val Lys Ser Lys Ser Pro
                245                 250                 255
Pro Ser Ala Gly Pro Leu Val Val His Cys Ser Ala Gly Ala Gly Arg
            260                 265                 270
Thr Gly Cys Phe Ile Val Ile Asp Ile Met Leu Asp Met Ala Glu Arg
        275                 280                 285
Glu Gly Val Val Asp Ile Tyr Asn Cys Val Arg Glu Leu Arg Ser Arg
    290                 295                 300
Arg Val Asn Met Val Gln Thr Glu Glu Gln Tyr Val Phe Ile His Asp
305                 310                 315                 320
```

```
Ala Ile Leu Glu Ala Cys Leu Cys Gly Asp Thr Ser Val Pro Ala Ser
                325                 330                 335
Gln Val Arg Ser Leu Tyr Tyr Asp Met Asn Lys Leu Asp Pro Gln Thr
            340                 345                 350
Asn Ser Ser Gln Ile Lys Glu Glu Phe Arg Thr Leu Asn Met Val Thr
        355                 360                 365
Pro Thr Leu Arg Val Glu Asp Cys Ser Ile Ala Leu Leu Pro Arg Asn
    370                 375                 380
His Glu Lys Asn Arg Cys Met Asp Ile Leu Pro Pro Asp Arg Cys Leu
385                 390                 395                 400
Pro Phe Leu Ile Thr Ile Asp Gly Glu Ser Ser Asn Tyr Ile Asn Ala
                405                 410                 415
Ala Leu Met Asp Ser Tyr Lys Gln Pro Ser Ala Phe Ile Val Thr Gln
            420                 425                 430
His Pro Leu Pro Asn Thr Val Lys Asp Phe Trp Arg Leu Val Leu Asp
        435                 440                 445
Tyr His Cys Thr Ser Val Val Met Leu Asn Asp Val Asp Pro Ala Gln
    450                 455                 460
Leu Cys Pro Gln Tyr Trp Pro Glu Asn Gly Val His Arg His Gly Pro
465                 470                 475                 480
Ile Gln Val Glu Phe Val Ser Ala Asp Leu Glu Glu Asp Ile Ile Ser
                485                 490                 495
Arg Ile Phe Arg Ile Tyr Asn Ala Ala Arg Pro Gln Asp Gly Tyr Arg
            500                 505                 510
Met Val Gln Gln Phe Gln Phe Leu Gly Trp Pro Met Tyr Arg Asp Thr
        515                 520                 525
Pro Val Ser Lys Arg Ser Phe Leu Lys Leu Ile Arg Gln Val Asp Lys
    530                 535                 540
Trp Gln Glu Glu Tyr Asn Gly Gly Glu Gly Arg Thr Val Val His Cys
545                 550                 555                 560
Leu Asn Gly Gly Gly Arg Ser Gly Thr Phe Cys Ala Ile Ser Ile Val
                565                 570                 575
Cys Glu Met Leu Arg His Gln Arg Thr Val Asp Val Phe His Ala Val
            580                 585                 590
Lys Thr Leu Arg Asn Asn Lys Pro Asn Met Val Asp Leu Leu Asp Gln
        595                 600                 605
Tyr Lys Phe Cys Tyr Glu Val Ala Leu Glu Tyr Leu Asn Ser Gly
    610                 615                 620         623
```

<210> 1191
<211> 86
<212>Amino acid
<213> Homo sapiens

<400> 1191

```
Pro Leu Thr Tyr Asn Lys Lys Tyr Thr Tyr Pro Trp Trp Gly Asp Ala
  1                 5                  10                  15
Leu Gly Trp Leu Leu Ala Leu Ser Ser Met Val Cys Ile Pro Ala Trp
             20                  25                  30
Ser Leu Tyr Arg Leu Gly Thr Leu Lys Gly Pro Phe Arg Glu Arg Ile
         35                  40                  45
Arg Gln Leu Met Cys Pro Ala Glu Asp Leu Pro Gln Arg Asn Pro Ala
     50                  55                  60
Gly Pro Ser Ala Pro Ala Thr Pro Arg Thr Ser Leu Leu Arg Leu Thr
 65                  70                  75                  80
Glu Leu Glu Ser His Cys
                 85  86
```

<210> 1192
<211> 109
<212>Amino acid
<213> Homo sapiens

<400> 1192

```
Thr Leu Ser Glu Ser Gly Ala Leu Phe Ser Leu Gly Pro Pro Pro Leu
 1               5                  10                  15
Ser Leu Lys Ser Ser Ser Ala Pro Arg Pro Tyr Ser Thr Leu Arg Asp
            20                  25                  30
Cys Leu Glu His Phe Ala Glu Leu Phe Asp Leu Gly Phe Pro Asn Pro
        35                  40                  45
Leu Ala Glu Arg Ile Ile Phe Glu Thr His Gln Ile His Phe Ala Asn
    50                  55                  60
Cys Ser Leu Gly Gln Pro Thr Phe Ser Asp Pro Pro Glu Asp Val Leu
65                  70                  75                  80
Leu Ala Met Ile Ile Ala Pro Ile Cys Leu Ile Pro Phe Leu Ile Thr
                85                  90                  95
Leu Val Val Trp Arg Ser Lys Asp Ser Glu Ala Gln Ala
            100                 105                 109
```

<210> 1193
<211> 257
<212>Amino acid
<213> Homo sapiens

<400> 1193

```
Cys Glu Glu Arg Glu Gln Glu Lys Asp Asp Val Asp Val Ala Leu Leu
 1               5                  10                  15
Pro Thr Ile Val Glu Lys Val Ile Leu Pro Lys Leu Thr Val Ile Ala
            20                  25                  30
Glu Asn Met Trp Asp Pro Phe Ser Thr Thr Gln Thr Ser Arg Met Val
        35                  40                  45
Gly Ile Thr Leu Lys Leu Ile Asn Gly Tyr Pro Ser Val Val Asn Ala
    50                  55                  60
Glu Asn Lys Asn Thr Gln Val Tyr Leu Lys Ala Leu Leu Leu Arg Met
65                  70                  75                  80
Arg Arg Thr Leu Asp Asp Asp Val Phe Met Pro Leu Tyr Pro Lys Asn
                85                  90                  95
Val Leu Glu Asn Lys Asn Ser Gly Pro Tyr Leu Phe Phe Gln Arg Gln
            100                 105                 110
Phe Trp Ser Ser Val Lys Leu Leu Gly Asn Phe Leu Gln Trp Tyr Gly
        115                 120                 125
Ile Phe Ser Asn Lys Thr Leu Gln Glu Leu Ser Ile Asp Gly Leu Leu
    130                 135                 140
Asn Arg Tyr Ile Leu Met Ala Phe Gln Asn Ser Glu Tyr Gly Asp Asp
145                 150                 155                 160
Ser Ile Lys Lys Ala Gln Asn Val Ile Asn Cys Phe Pro Lys Gln Trp
                165                 170                 175
Phe Met Asn Leu Lys Gly Glu Arg Thr Ile Ser Gln Leu Glu Asn Phe
            180                 185                 190
Cys Arg Tyr Leu Val His Leu Ala Asp Thr Ile Tyr Arg Asn Ser Ile
        195                 200                 205
Gly Cys Ser Asp Val Glu Lys Arg Asn Ala Arg Glu Asn Ile Lys Gln
    210                 215                 220
```

```
Ile Val Lys Leu Leu Ala Ser Val Arg Ala Leu Asp His Ala Met Ser
225                 230                 235                 240
Val Ala Ser Asp His Asn Val Lys Glu Phe Lys Ser Leu Ile Glu Gly
                245                 250                 255
Lys
257
```

<210> 1194
<211> 416
<212>Amino acid
<213> Homo sapiens

<400> 1194

```
Thr Pro Phe Cys Phe Leu Cys Ser Leu Val Phe Arg Ser Arg Val Trp
  1               5                  10                  15
Ala Glu Pro Cys Leu Ile Asp Ala Ala Lys Glu Glu Tyr Asn Gly Val
            20                  25                  30
Ile Glu Glu Phe Leu Ala Thr Gly Glu Lys Leu Phe Gly Pro Tyr Val
        35                  40                  45
Trp Gly Arg Tyr Asp Leu Leu Phe Met Pro Pro Ser Phe Pro Phe Gly
    50                  55                  60
Gly Met Glu Asn Pro Cys Leu Thr Phe Val Thr Pro Cys Leu Leu Ala
65                  70                  75                  80
Gly Asp Arg Ser Leu Ala Asp Val Ile Ile His Glu Ile Ser His Ser
                85                  90                  95
Trp Phe Gly Asn Leu Val Thr Asn Ala Asn Trp Gly Glu Phe Trp Leu
            100                 105                 110
Asn Glu Gly Phe Thr Met Tyr Ala Gln Arg Arg Ile Ser Thr Ile Leu
        115                 120                 125
Phe Gly Ala Ala Tyr Thr Cys Leu Glu Ala Ala Thr Gly Arg Ala Leu
    130                 135                 140
Leu Arg Gln His Met Asp Ile Thr Gly Glu Glu Asn Pro Leu Asn Lys
145                 150                 155                 160
Leu Arg Val Lys Ile Glu Pro Gly Val Asp Pro Asp Asp Thr Tyr Asn
                165                 170                 175
Glu Thr Pro Tyr Glu Lys Gly Phe Cys Phe Val Ser Tyr Leu Ala His
            180                 185                 190
Leu Val Gly Asp Gln Asp Gln Phe Asp Ser Phe Leu Lys Ala Tyr Val
        195                 200                 205
His Glu Phe Lys Phe Arg Ser Ile Leu Ala Asp Asp Phe Leu Asp Phe
    210                 215                 220
Tyr Leu Glu Tyr Phe Pro Glu Leu Lys Lys Lys Arg Val Asp Ile Ile
225                 230                 235                 240
Pro Gly Phe Glu Phe Asp Arg Trp Leu Asn Thr Pro Gly Trp Pro Pro
                245                 250                 255
Tyr Leu Pro Asp Leu Ser Pro Gly Asp Ser Leu Met Lys Pro Ala Glu
            260                 265                 270
Glu Leu Ala Gln Leu Trp Ala Ala Glu Glu Leu Asp Met Lys Ala Ile
        275                 280                 285
Glu Ala Val Ala Ile Ser Pro Trp Lys Thr Tyr Gln Leu Val Tyr Phe
    290                 295                 300
Leu Asp Lys Ile Leu Gln Lys Ser Pro Leu Pro Pro Gly Asn Val Lys
305                 310                 315                 320
Lys Leu Gly Asp Thr Tyr Pro Ser Ile Ser Asn Ala Arg Asn Ala Glu
                325                 330                 335
Leu Arg Leu Arg Trp Gly Gln Ile Val Leu Lys Asn Asp His Gln Glu
            340                 345                 350
Asp Phe Trp Lys Val Lys Glu Phe Leu His Asn Gln Gly Lys Gln Lys
        355                 360                 365
```

```
Tyr Thr Leu Pro Leu Tyr His Ala Met Met Gly Gly Ser Glu Val Ala
    370                 375                 380
Gln Thr Leu Ala Lys Glu Thr Phe Ala Ser Thr Ala Ser Gln Leu His
385                 390                 395                 400
Ser Asn Val Val Asn Tyr Val Gln Gln Ile Val Ala Pro Lys Gly Ser
                405                 410                 415 416
```

<210> 1195
<211> 295
<212>Amino acid
<213> Homo sapiens

<400> 1195

```
Cys Ala Ser Gly Ser Ser Gly Trp Arg Pro Val Leu Trp Ala Gly Ala
  1               5                  10                  15
Phe Thr Met Ala Ser Ala Glu Leu Asp Tyr Thr Ile Glu Ile Pro Asp
             20                  25                  30
Gln Pro Cys Trp Ser Gln Lys Asn Ser Pro Ser Pro Gly Gly Lys Glu
         35                  40                  45
Ala Glu Thr Arg Gln Pro Val Val Ile Leu Leu Gly Trp Gly Gly Cys
     50                  55                  60
Lys Asp Lys Asn Leu Ala Lys Tyr Ser Ala Ile Tyr His Lys Arg Gly
 65                  70                  75                  80
Cys Ile Val Ile Arg Tyr Thr Ala Pro Trp His Met Val Phe Phe Ser
                85                  90                  95
Glu Ser Leu Gly Ile Pro Ser Leu Arg Val Leu Ala Gln Lys Leu Leu
            100                 105                 110
Glu Leu Leu Phe Asp Tyr Glu Ile Glu Lys Glu Pro Leu Leu Phe His
        115                 120                 125
Val Phe Ser Asn Gly Gly Val Met Leu Tyr Arg Tyr Val Leu Glu Leu
    130                 135                 140
Leu Gln Thr Arg Arg Phe Cys Arg Leu Arg Val Val Gly Thr Ile Phe
145                 150                 155                 160
Asp Ser Ala Pro Gly Asp Ser Asn Leu Val Gly Ala Leu Arg Ala Leu
                165                 170                 175
Ala Ala Ile Leu Glu Arg Arg Ala Ala Met Leu Arg Leu Leu Leu Leu
            180                 185                 190
Val Ala Phe Ala Leu Val Val Val Leu Phe His Val Leu Leu Ala Pro
        195                 200                 205
Ile Thr Ala Leu Phe His Thr His Phe Tyr Asp Arg Leu Gln Asp Ala
    210                 215                 220
Gly Ser Arg Trp Pro Glu Leu Tyr Leu Tyr Ser Arg Ala Asp Glu Val
225                 230                 235                 240
Val Leu Ala Arg Asp Ile Glu Arg Met Val Glu Ala Arg Leu Ala Arg
                245                 250                 255
Arg Val Leu Ala Arg Ser Val Asp Phe Val Ser Ser Ala His Val Ser
            260                 265                 270
His Leu Arg Asp Tyr Pro Thr Tyr Tyr Thr Ser Leu Cys Val Asp Phe
        275                 280                 285
Met Arg Asn Trp Val Arg Cys
    290                 295
```

<210> 1196
<211> 97
<212>Amino acid
<213> Homo sapiens

<400> 1196
Pro Arg Val Arg Asp Arg Leu Pro Ser Thr Gly Val Arg Asp Arg Lys
1 5 10 15
Gly Asp Lys Pro Trp Lys Glu Ser Gly Gly Ser Val Glu Ala Pro Arg
20 25 30
Met Gly Phe Thr His Pro Pro Gly His Leu Ser Gly Cys Gln Ser Ser
35 40 45
Leu Ala Ser Gly Glu Thr Gly Thr Gly Ser Ala Asp Pro Pro Gly Gly
50 55 60
Pro Arg Pro Gly Leu Thr Arg Arg Ala Pro Val Lys Asp Thr Pro Gly
65 70 75 80
Arg Ala Pro Ala Ala Asp Ala Ala Pro Ala Gly Pro Ser Ser Cys Leu
85 90 95
Gly
97

<210> 1197
<211> 204
<212>Amino acid
<213> Homo sapiens

<400> 1197
Gln Gly Arg Thr Ser Cys Ile Gly Leu Tyr Thr Tyr Gln Arg Arg Ile
1 5 10 15
Cys Lys Tyr Arg Asp Gln Tyr Asn Trp Phe Phe Leu Ala Arg Pro Thr
20 25 30
Thr Phe Ala Ile Ile Glu Asn Leu Lys Tyr Phe Leu Leu Lys Lys Asp
35 40 45
Pro Ser Gln Pro Phe Tyr Leu Gly His Thr Ile Lys Ser Gly Asp Leu
50 55 60
Glu Tyr Val Gly Met Glu Gly Gly Ile Val Leu Ser Val Glu Ser Met
65 70 75 80
Lys Arg Leu Asn Ser Leu Leu Asn Ile Pro Glu Lys Cys Pro Glu Gln
85 90 95
Gly Gly Met Ile Trp Lys Ile Ser Glu Asp Lys Gln Leu Ala Val Cys
100 105 110
Leu Lys Tyr Ala Gly Val Phe Ala Glu Asn Ala Glu Asp Ala Asp Gly
115 120 125
Lys Asp Val Phe Asn Thr Lys Ser Val Gly Leu Ser Ile Lys Glu Ala
130 135 140
Met Thr Tyr His Pro Asn Gln Val Val Glu Gly Cys Cys Ser Asp Met
145 150 155 160
Ala Val Thr Phe Asn Gly Leu Thr Pro Asn Gln Met His Val Met Met
165 170 175
Tyr Gly Val Tyr Arg Leu Arg Ala Phe Gly His Ile Phe Asn Asp Ala
180 185 190
Leu Val Phe Leu Pro Pro Asn Gly Ser Asp Asn Asp
195 200 204

<210> 1198
<211> 238
<212>Amino acid
<213> Homo sapiens

<400> 1198

```
His Glu Gly Lys Pro Thr Arg Gly Arg Gly Arg Gly Gly Ser Leu Ser
 1               5                  10                  15
Thr Arg Gly Arg Gly Ser Glu Val Pro Asp Ser Ala His Leu Ala Pro
            20                  25                  30
Thr Pro Leu Phe Ser Glu Ser Gly Cys Cys Gly Leu Arg Ser Arg Phe
        35                  40                  45
Leu Thr Asp Cys Lys Met Glu Glu Gly Gly Asn Leu Gly Gly Leu Ile
    50                  55                  60
Lys Met Val His Leu Leu Val Leu Ser Gly Ala Trp Gly Met Gln Met
65                  70                  75                  80
Trp Val Thr Phe Val Ser Gly Phe Leu Leu Phe Arg Ser Leu Pro Arg
                85                  90                  95
His Thr Phe Gly Leu Val Gln Ser Lys Leu Phe Pro Phe Tyr Phe His
            100                 105                 110
Ile Ser Met Gly Cys Ala Phe Ile Asn Leu Cys Ile Leu Ala Ser Gln
        115                 120                 125
His Ala Trp Ala Gln Leu Thr Phe Trp Glu Ala Ser Gln Leu Tyr Leu
    130                 135                 140
Leu Phe Leu Ser Leu Thr Leu Ala Thr Val Asn Ala Arg Trp Leu Glu
145                 150                 155                 160
Pro Arg Thr Thr Ala Ala Met Trp Ala Leu Gln Thr Val Glu Lys Glu
                165                 170                 175
Arg Gly Leu Gly Gly Glu Val Pro Gly Ser His Gln Gly Pro Asp Pro
            180                 185                 190
Tyr Arg Gln Leu Arg Glu Lys Asp Pro Lys Tyr Ser Ala Leu Arg Gln
        195                 200                 205
Asn Phe Phe Arg Tyr His Gly Leu Ser Ser Leu Cys Asn Leu Gly Cys
    210                 215                 220
Val Leu Ser Asn Gly Leu Cys Leu Ala Ala Leu Pro Trp Lys
225                 230                 235         238
```

<210> 1199
<211> 100
<212>Amino acid
<213> Homo sapiens

<400> 1199

```
Lys Gln Leu Asp Lys Gln Leu Arg Ala Asp Pro Ser Gly Ser Leu Pro
 1               5                  10                  15
Pro Leu Pro Pro Ser Pro Pro Pro Pro Leu Glu Ala Gly Gly Arg Pro
            20                  25                  30
Pro Glu Val Pro Pro Arg Gly Pro Ser Ala Val Pro Ser Phe Pro Ser
        35                  40                  45
Val Ser Gly Asp Trp Gly Gly Pro Val Glu Ala Gly Glu Gly Gly Gln
    50                  55                  60
Gln Gly Arg Gly Arg Ala Arg Ala Arg Pro Cys Ser Leu Pro Pro Leu
65                  70                  75                  80
Leu Pro Pro Ser Pro Val Cys Arg Leu Ser Gly Ser Arg Ala Pro Leu
                85                  90                  95
Gly Cys Asp Gly
            100
```

<210> 1200
<211> 194
<212>Amino acid
<213> Homo sapiens

<400> 1200

```
Arg Asn Gln Leu Ser Ser Gln Lys Ser Val Pro Trp Val Pro Ile Leu
 1               5                  10                  15
Lys Ser Leu Pro Leu Trp Ala Ile Val Val Ala His Phe Ser Tyr Asn
            20                  25                  30
Trp Thr Phe Tyr Thr Leu Leu Thr Leu Leu Pro Thr Tyr Met Lys Glu
        35                  40                  45
Ile Leu Arg Phe Asn Val Gln Glu Asn Gly Phe Leu Ser Ser Leu Pro
    50                  55                  60
Tyr Leu Gly Ser Trp Leu Cys Met Ile Leu Ser Gly Gln Ala Ala Asp
65                  70                  75                  80
Asn Leu Arg Ala Lys Trp Asn Phe Ser Thr Leu Cys Val Arg Arg Ile
                85                  90                  95
Phe Ser Leu Ile Gly Met Ile Gly Pro Ala Val Phe Leu Val Ala Ala
            100                 105                 110
Gly Phe Ile Gly Cys Asp Tyr Ser Leu Ala Val Ala Phe Leu Thr Ile
        115                 120                 125
Ser Thr Thr Leu Gly Gly Phe Cys Ser Ser Gly Phe Ser Ile Asn His
    130                 135                 140
Leu Asp Ile Ala Pro Ser Tyr Ala Gly Ile Leu Leu Gly Ile Thr Asn
145                 150                 155                 160
Thr Phe Ala Thr Ile Pro Gly Met Val Gly Pro Val Ile Ala Lys Ser
                165                 170                 175
Leu Thr Pro Asp Met Gly Ile Ser Leu His Arg Pro Gly Trp Ser Ala
            180                 185                 190
Val Ala
    194
```

<210> 1201
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 1201

```
Gly Pro Ser Gly Thr Thr His Ala Ser Ala His Ser Gly His Pro Gly
 1               5                  10                  15
Ser Pro Arg Gly Ser Leu Ser Arg His Pro Ser Ser Gln Leu Ala Gly
            20                  25                  30
Pro Gly Val Glu Gly Gly Glu Gly Thr Gln Lys Pro Arg Asp Tyr Ile
        35                  40                  45
Ile Leu Ala Ile Leu Ser Cys Phe Cys Pro Met Trp Pro Val Asn Ile
    50                  55                  60
Val Ala Phe Ala Tyr Ala Val Met Ser Arg Asn Ser Leu Gln Gln Gly
65                  70                  75                  80
Asp Val Asp Gly Ala Gln Arg Leu Gly Arg Val Ala Lys Leu Leu Ser
                85                  90                  95
Ile Val Ala Leu Val Gly Gly Val Leu Ile Ile Ile Ala Ser Cys Val
            100                 105                 110
Ile Asn Leu Gly Val Tyr Lys
        115                 119
```

<210> 1202
<211> 66
<212>Amino acid
<213> Homo sapiens

<400> 1202

```
Ser Leu Phe Leu Ser Phe Pro Pro Leu Ser Phe Lys Met Thr Leu Asn
 1               5                  10                  15
Asp Ala Met Arg Asn Lys Ala Arg Leu Ser Ile Thr Gly Ser Thr Gly
            20                  25                  30
Glu Asn Gly Arg Val Met Thr Pro Glu Phe Pro Lys Ala Val His Ala
        35                  40                  45
Val Pro Tyr Val Ser Pro Gly Met Gly Met Asn Val Ser Val Thr Asp
    50                  55                  60
Leu Ser
65  66
```

<210> 1203
<211> 509
<212>Amino acid
<213> Homo sapiens

<400> 1203

```
Asp Asp Val Pro Pro Pro Ala Pro Asp Leu Tyr Asp Val Pro Pro Gly
 1               5                  10                  15
Leu Arg Arg Pro Gly Pro Gly Thr Leu Tyr Asp Val Pro Arg Glu Arg
            20                  25                  30
Val Leu Pro Pro Glu Val Ala Asp Gly Gly Val Val Asp Ser Gly Val
        35                  40                  45
Tyr Ala Val Pro Pro Pro Ala Glu Arg Glu Ala Pro Ala Glu Gly Lys
    50                  55                  60
Arg Leu Ser Ala Ser Ser Thr Gly Ser Thr Arg Ser Ser Gln Ser Ala
65                  70                  75                  80
Ser Ser Leu Glu Val Ala Gly Pro Gly Arg Glu Pro Leu Glu Leu Glu
                85                  90                  95
Val Ala Val Glu Ala Leu Ala Arg Leu Gln Gln Gly Val Ser Ala Thr
            100                 105                 110
Val Ala His Leu Leu Asp Leu Ala Gly Ser Ala Gly Ala Thr Gly Ser
        115                 120                 125
Trp Arg Ser Pro Ser Glu Pro Gln Glu Pro Leu Val Gln Asp Leu Gln
    130                 135                 140
Ala Ala Val Ala Ala Val Gln Ser Ala Val His Glu Leu Leu Glu Phe
145                 150                 155                 160
Ala Arg Ser Ala Val Gly Asn Ala Ala His Thr Ser Asp Arg Ala Leu
                165                 170                 175
His Ala Lys Leu Ser Arg Gln Leu Gln Lys Met Glu Asp Val His Gln
            180                 185                 190
Thr Leu Val Ala His Gly Gln Ala Leu Asp Ala Gly Arg Gly Gly Ser
        195                 200                 205
Gly Ala Thr Leu Glu Asp Leu Asp Arg Leu Val Ala Cys Ser Arg Ala
    210                 215                 220
Val Pro Glu Asp Ala Lys Gln Leu Ala Ser Phe Leu His Gly Asn Ala
225                 230                 235                 240
```

```
Ser Leu Leu Phe Arg Arg Thr Lys Ala Thr Ala Pro Gly Pro Glu Gly
                245                 250                 255
Gly Gly Thr Leu His Pro Asn Pro Thr Asp Lys Thr Ser Ser Ile Gln
            260                 265                 270
Ser Arg Pro Leu Pro Ser Pro Pro Lys Phe Thr Ser Gln Asp Ser Pro
        275                 280                 285
Asp Gly Gln Tyr Glu Asn Ser Glu Gly Gly Trp Met Glu Asp Tyr Asp
    290                 295                 300
Tyr Val His Leu Gln Gly Lys Glu Glu Phe Glu Lys Thr Gln Lys Glu
305                 310                 315                 320
Leu Leu Glu Lys Gly Ser Ile Thr Arg Gln Gly Lys Ser Gln Leu Glu
                325                 330                 335
Leu Gln Gln Leu Lys Gln Phe Glu Arg Leu Glu Gln Glu Val Ser Arg
            340                 345                 350
Pro Ile Asp His Asp Leu Ala Asn Trp Thr Pro Ala Gln Pro Leu Ala
        355                 360                 365
Pro Gly Arg Thr Gly Gly Leu Gly Pro Ser Asp Arg Gln Leu Leu Leu
    370                 375                 380
Phe Tyr Leu Glu Gln Cys Glu Ala Asn Leu Thr Thr Leu Thr Asn Ala
385                 390                 395                 400
Val Asp Ala Phe Phe Thr Ala Val Ala Thr Asn Gln Pro Pro Lys Ile
                405                 410                 415
Phe Val Ala His Ser Lys Phe Val Ile Leu Ser Ala His Lys Leu Val
            420                 425                 430
Phe Ile Gly Asp Thr Leu Ser Arg Gln Ala Lys Ala Ala Asp Val Arg
        435                 440                 445
Ser Gln Val Thr His Tyr Ser Asn Leu Leu Cys Asp Leu Leu Arg Gly
    450                 455                 460
Ile Val Ala Thr Thr Lys Ala Ala Ala Leu Gln Tyr Pro Ser Pro Ser
465                 470                 475                 480
Ala Ala Gln Asp Met Val Glu Arg Val Lys Glu Leu Gly His Ser Thr
                485                 490                 495
Gln Gln Phe Arg Arg Val Leu Gly Gln Leu Ala Ala Ala
            500                 505                 509
```

<210> 1204
<211> 453
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(453)
<223> X = any amino acid or stop code

<400> 1204

```
Glu Met Glu Glu Pro Gln Lys Ser Tyr Val Asn Thr Met Asp Leu Glu
  1               5                  10                  15
Arg Asp Glu Pro Leu Lys Ser Thr Gly Pro Gln Ile Ser Val Ser Glu
            20                  25                  30
Phe Ser Cys His Cys Cys Tyr Asp Ile Leu Val Asn Pro Thr Thr Leu
        35                  40                  45
Asn Cys Gly His Ser Phe Cys Arg His Cys Leu Ala Leu Trp Trp Ala
    50                  55                  60
Ser Ser Lys Lys Thr Glu Cys Pro Glu Cys Arg Glu Lys Trp Glu Gly
65                  70                  75                  80
Phe Pro Lys Val Ser Ile Leu Leu Arg Asp Ala Ile Glu Lys Leu Phe
                85                  90                  95
Pro Asp Ala Ile Arg Leu Arg Phe Glu Asp Ile Gln Gln Asn Asn Asp
```

```
            100                 105                 110
Ile Val Gln Ser Leu Ala Ala Phe Gln Lys Tyr Gly Asn Asp Gln Ile
        115                 120                 125
Pro Leu Ala Pro Asn Thr Gly Arg Ala Asn Gln Gln Met Gly Gly Gly
    130                 135                 140
Phe Phe Ser Gly Val Leu Thr Ala Leu Thr Gly Val Ala Val Val Leu
145                 150                 155                 160
Leu Val Tyr His Trp Ser Ser Arg Glu Ser Glu His Asp Leu Leu Val
                165                 170                 175
His Lys Ala Val Ala Lys Trp Thr Ala Glu Glu Val Val Leu Trp Leu
            180                 185                 190
Glu Gln Leu Gly Pro Trp Ala Ser Leu Tyr Arg Glu Arg Phe Leu Ser
        195                 200                 205
Glu Arg Val Asn Gly Arg Leu Leu Leu Thr Leu Thr Glu Glu Glu Phe
    210                 215                 220
Ser Lys Thr Pro Tyr Thr Ile Glu Asn Ser Ser His Arg Arg Ala Ile
225                 230                 235                 240
Leu Met Glu Leu Glu Arg Val Lys Ala Leu Gly Val Lys Pro Pro Gln
                245                 250                 255
Asn Leu Trp Glu Tyr Lys Ala Val Asn Pro Gly Arg Ser Leu Phe Leu
            260                 265                 270
Leu Tyr Ala Leu Lys Ser Ser Pro Arg Leu Ser Leu Leu Tyr Leu Tyr
        275                 280                 285
Leu Phe Asp Tyr Thr Asp Thr Phe Leu Pro Phe Ile His Thr Ile Cys
    290                 295                 300
Pro Leu Gln Glu Asp Ser Ser Gly Glu Asp Ile Val Thr Lys Leu Leu
305                 310                 315                 320
Asp Leu Lys Glu Pro Thr Trp Lys Gln Trp Arg Glu Phe Leu Val Lys
                325                 330                 335
Tyr Ser Phe Leu Pro Tyr Gln Leu Ile Ala Glu Phe Ala Trp Asp Trp
            340                 345                 350
Leu Glu Val His Tyr Trp Thr Ser Arg Phe Leu Ile Ile Asn Ala Met
        355                 360                 365
Leu Leu Ser Val Leu Glu Leu Phe Ser Phe Trp Arg Ile Trp Ser Arg
    370                 375                 380
Ser Glu Leu Lys Xaa Val Gly Phe Arg Phe Leu Arg Leu Gly Val Ala
385                 390                 395                 400
Ala Leu Gly Ser Val Glu Val Ala Gly Leu Arg Gly Val Val Lys Gly
                405                 410                 415
Glu Arg Pro Leu Leu Tyr Gly His Gly Ala Gly Ala Arg Phe Pro His
            420                 425                 430
Ser Val Leu Leu Leu Pro Val Ala Lys Pro Leu Pro Leu Pro Leu Leu
        435                 440                 445
Pro Arg Gly Leu Cys
    450         453
```

<210> 1205
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 1205

```
Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu Ser Pro
  1               5                  10                  15
Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn Arg Asn
             20                  25                  30
Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu Gln Ile
         35                  40                  45
Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn Ser Gln
```

```
     50                  55                  60
Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser Glu Ser
 65                  70                  75                  80
```

<210> 1206
<211> 205
<212>Amino acid
<213> Homo sapiens

<400> 1206

```
Leu Tyr Tyr Ser Gln Asp Glu Glu Ser Lys Ile Met Ile Ser Asp Phe
  1               5                  10                  15
Gly Leu Ser Lys Met Glu Gly Lys Gly Asp Val Met Ser Thr Ala Cys
             20                  25                  30
Gly Thr Pro Gly Tyr Val Ala Pro Glu Val Leu Ala Gln Lys Pro Tyr
         35                  40                  45
Ser Lys Ala Val Asp Cys Trp Ser Ile Gly Val Ile Ala Tyr Ile Leu
     50                  55                  60
Leu Cys Gly Tyr Pro Pro Phe Tyr Asp Glu Asn Asp Ser Lys Leu Phe
 65                  70                  75                  80
Glu Gln Ile Leu Lys Ala Glu Tyr Glu Phe Asp Ser Pro Tyr Trp Asp
                 85                  90                  95
Asp Ile Ser Asp Ser Ala Lys Asp Phe Ile Arg Asn Leu Met Glu Lys
            100                 105                 110
Asp Pro Asn Lys Arg Tyr Thr Cys Glu Gln Ala Ala Arg His Pro Trp
        115                 120                 125
Ile Ala Gly Asp Thr Ala Leu Asn Lys Asn Ile His Glu Ser Val Ser
    130                 135                 140
Ala Gln Ile Arg Lys Asn Phe Ala Lys Ser Lys Trp Arg Gln Ala Phe
145                 150                 155                 160
Asn Ala Thr Ala Val Val Arg His Met Arg Lys Leu His Leu Gly Ser
                165                 170                 175
Ser Leu Asp Ser Ser Asn Ala Ser Val Ser Ser Ser Leu Ser Leu Ala
            180                 185                 190
Ser Gln Lys Asp Cys Ala Ser Gly Thr Phe His Ala Leu
        195                 200                 205
```

<210> 1207
<211> 117
<212>Amino acid
<213> Homo sapiens

<400> 1207

```
Arg Thr Arg Gly Gly Ala Val Ser Phe Glu Asp Phe Ile Lys Gly Leu
  1               5                  10                  15
Ser Ile Leu Leu Arg Gly Thr Val Gln Glu Lys Leu Asn Trp Ala Phe
             20                  25                  30
Asn Leu Tyr Asp Ile Asn Lys Asp Gly Tyr Ile Thr Lys Glu Glu Met
         35                  40                  45
Leu Asp Ile Met Lys Ala Ile Tyr Asp Met Met Gly Lys Cys Thr Tyr
     50                  55                  60
Pro Val Leu Lys Glu Asp Ala Pro Arg Gln His Val Glu Thr Phe Phe
```

```
 65                  70                  75                  80
Gln Lys Met Asp Lys Asn Lys Asp Gly Val Val Thr Ile Asp Glu Phe
                 85                  90                  95
Ile Glu Ser Cys Gln Lys Asp Glu Asn Ile Met Arg Ser Met Gln Leu
            100                 105                 110
Phe Glu Asn Val Ile
        115     117
```

<210> 1208
<211> 337
<212>Amino acid
<213> Homo sapiens

<400> 1208

```
Pro Arg Ser Pro Glu His His Thr Pro Ala Trp His Glu Gly Arg Ser
  1               5                  10                  15
Leu Gly Pro Ile Met Ala Ser Met Ala Asp Arg Asn Met Lys Leu Phe
             20                  25                  30
Ser Gly Arg Val Val Pro Ala Gln Gly Glu Glu Thr Phe Glu Asn Trp
         35                  40                  45
Leu Thr Gln Val Asn Gly Val Leu Pro Asp Trp Asn Met Ser Glu Glu
     50                  55                  60
Glu Lys Leu Lys Arg Leu Met Lys Thr Leu Arg Gly Pro Ala Arg Glu
 65                  70                  75                  80
Val Met Arg Val Leu Gln Ala Thr Asn Pro Asn Leu Ser Val Ala Asp
                 85                  90                  95
Phe Leu Arg Ala Met Lys Leu Val Phe Gly Glu Ser Glu Ser Ser Val
            100                 105                 110
Thr Ala His Gly Lys Phe Phe Asn Thr Leu Gln Ala Gln Gly Glu Lys
        115                 120                 125
Ala Ser Leu Tyr Val Ile Arg Leu Glu Val Gln Leu Gln Asn Ala Ile
    130                 135                 140
Gln Ala Gly Ile Ile Ala Glu Lys Asp Ala Asn Arg Thr Arg Leu Gln
145                 150                 155                 160
Gln Leu Leu Leu Gly Gly Glu Leu Ser Arg Asp Leu Arg Leu Arg Leu
                165                 170                 175
Lys Asp Phe Leu Arg Met Tyr Ala Asn Glu Gln Glu Arg Leu Pro Asn
            180                 185                 190
Phe Leu Glu Leu Ile Lys Met Val Arg Glu Glu Glu Asp Trp Asp Asp
        195                 200                 205
Ala Phe Ile Lys Arg Lys Arg Pro Lys Arg Ser Glu Ser Met Val Glu
    210                 215                 220
Arg Ala Val Ser Pro Val Ala Phe Gln Gly Ser Pro Pro Ile Val Ile
225                 230                 235                 240
Gly Ser Ala Asp Cys Asn Val Ile Glu Ile Asp Asp Thr Leu Asp Asp
                245                 250                 255
Ser Asp Glu Asp Val Ile Leu Val Glu Ser Gln Asp Pro Pro Leu Pro
            260                 265                 270
Ser Trp Gly Ala Pro Pro Leu Arg Asp Arg Ala Arg Pro Gln Asp Glu
        275                 280                 285
Val Leu Val Ile Asp Ser Pro His Asn Ser Arg Ala Gln Phe Pro Ser
    290                 295                 300
Thr Ser Gly Gly Ser Gly Tyr Lys Asn Asn Gly Pro Gly Glu Met Arg
305                 310                 315                 320
Arg Ala Arg Lys Arg Lys His Thr Ile Arg Cys Ser Tyr Cys Gly Glu
                325                 330                 335
Glu
337
```

<210> 1209
<211> 64
<212>Amino acid
<213> Homo sapiens

<400> 1209
Ser Val Ala Cys Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln
1 5 10 15
Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro
20 25 30
Ser Asn Ser Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His
35 40 45
Arg Ser Gln Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr
50 55 60 64

<210> 1210
<211> 316
<212>Amino acid
<213> Homo sapiens

<400> 1210
Tyr Ser Ala Val Glu Phe Ala Glu Arg Gly Ser Gly Gly Ser Ser Gly
1 5 10 15
Asp Glu Leu Arg Glu Asp Asp Glu Pro Val Lys Lys Arg Gly Arg Lys
20 25 30
Gly Arg Gly Arg Gly Pro Pro Ser Ser Ser Asp Ser Glu Pro Glu Ala
35 40 45
Glu Leu Glu Arg Glu Ala Lys Lys Ser Ala Lys Lys Pro Gln Ser Ser
50 55 60
Ser Thr Glu Pro Ala Arg Lys Pro Gly Gln Lys Glu Lys Arg Val Arg
65 70 75 80
Pro Glu Glu Lys Gln Gln Ala Lys Pro Val Lys Val Glu Arg Thr Arg
85 90 95
Lys Arg Ser Glu Gly Phe Ser Met Asp Arg Lys Val Glu Lys Lys Lys
100 105 110
Glu Pro Ser Val Glu Glu Lys Leu Gln Lys Leu His Ser Glu Ile Lys
115 120 125
Phe Ala Leu Lys Val Asp Ser Pro Asp Val Lys Arg Cys Leu Asn Ala
130 135 140
Leu Glu Glu Leu Gly Thr Leu Gln Val Thr Ser Gln Ile Leu Gln Lys
145 150 155 160
Asn Thr Asp Val Val Ala Thr Leu Lys Lys Ile Arg Arg Tyr Lys Ala
165 170 175
Asn Lys Asp Val Met Glu Lys Ala Ala Glu Val Tyr Thr Arg Leu Lys
180 185 190
Ser Arg Val Leu Gly Pro Lys Ile Glu Ala Val Gln Lys Val Asn Lys
195 200 205
Ala Gly Met Glu Lys Glu Lys Ala Glu Glu Lys Leu Ala Gly Glu Glu
210 215 220
Leu Ala Gly Glu Glu Ala Pro Gln Glu Lys Ala Glu Asp Lys Pro Ser
225 230 235 240
Thr Asp Leu Ser Ala Pro Val Asn Gly Glu Ala Thr Ser Gln Lys Gly

```
                245                 250                 255
Glu Ser Ala Glu Asp Lys Glu His Glu Glu Gly Arg Asp Ser Glu Glu
            260                 265                 270
Gly Pro Arg Cys Gly Ser Ser Glu Asp Leu His Asp Ser Val Arg Glu
        275                 280                 285
Gly Pro Asp Leu Asp Arg Pro Gly Ser Asp Arg Gln Glu Arg Glu Arg
    290                 295                 300
Ala Arg Gly Asp Ser Glu Ala Leu Asp Glu Glu Ser
305                 310                 315 316
```

<210> 1211
<211> 767
<212>Amino acid
<213> Homo sapiens

<400> 1211

```
Leu Ala Glu Leu Ser Ser Leu Ser Val Leu Arg Leu Ser His Asn Ser
  1                 5                  10                  15
Ile Ser His Ile Ala Glu Gly Ala Phe Lys Gly Leu Arg Ser Leu Arg
             20                  25                  30
Val Leu Asp Leu Asp His Asn Glu Ile Ser Gly Thr Ile Glu Asp Thr
         35                  40                  45
Ser Gly Ala Phe Ser Gly Leu Asp Ser Leu Ser Lys Leu Thr Leu Phe
     50                  55                  60
Gly Asn Lys Ile Lys Ser Val Ala Lys Arg Ala Phe Ser Gly Leu Glu
 65                  70                  75                  80
Gly Leu Glu His Leu Asn Leu Gly Gly Asn Ala Ile Arg Ser Val Gln
                 85                  90                  95
Phe Asp Ala Phe Val Lys Met Lys Asn Leu Lys Glu Leu His Ile Ser
            100                 105                 110
Ser Asp Ser Phe Leu Cys Asp Cys Gln Leu Lys Trp Leu Pro Pro Trp
        115                 120                 125
Leu Ile Gly Arg Met Leu Gln Ala Phe Val Thr Ala Thr Cys Ala His
    130                 135                 140
Pro Glu Ser Leu Lys Gly Gln Ser Ile Phe Ser Val Pro Pro Glu Ser
145                 150                 155                 160
Phe Val Cys Asp Asp Phe Leu Lys Pro Gln Ile Ile Thr Gln Pro Glu
                165                 170                 175
Thr Thr Met Ala Met Val Gly Lys Asp Ile Arg Phe Thr Cys Ser Ala
            180                 185                 190
Ala Ser Ser Ser Ser Ser Pro Met Thr Phe Ala Trp Lys Lys Asp Asn
        195                 200                 205
Glu Val Leu Thr Asn Ala Asp Met Glu Asn Phe Val His Val His Ala
    210                 215                 220
Gln Asp Gly Glu Val Met Glu Tyr Thr Thr Ile Leu His Leu Arg Gln
225                 230                 235                 240
Val Thr Phe Gly His Glu Gly Arg Tyr Gln Cys Val Ile Thr Asn His
                245                 250                 255
Phe Gly Ser Thr Tyr Ser His Lys Ala Arg Leu Thr Val Asn Val Leu
            260                 265                 270
Pro Ser Phe Thr Lys Thr Pro His Asp Ile Thr Ile Arg Thr Thr Thr
        275                 280                 285
Met Ala Arg Leu Glu Cys Ala Ala Thr Gly His Pro Asn Pro Gln Ile
    290                 295                 300
Ala Trp Gln Lys Asp Gly Gly Thr Asp Phe Pro Ala Ala Arg Glu Arg
305                 310                 315                 320
Arg Met His Val Met Pro Asp Asp Asp Val Phe Phe Ile Thr Asp Val
                325                 330                 335
Lys Ile Asp Asp Ala Gly Val Tyr Ser Cys Thr Ala Gln Asn Ser Ala
```

```
                340                 345                 350
Gly Ser Ile Ser Ala Asn Ala Thr Leu Thr Val Leu Glu Thr Pro Ser
        355                 360                 365
Leu Val Val Pro Leu Glu Asp Arg Val Val Ser Val Gly Glu Thr Val
    370                 375                 380
Ala Leu Gln Cys Lys Ala Thr Gly Asn Pro Pro Pro Arg Ile Thr Trp
385                 390                 395                 400
Phe Lys Gly Asp Arg Pro Leu Ser Leu Thr Glu Arg His His Leu Thr
                405                 410                 415
Pro Asp Asn Gln Leu Leu Val Val Gln Asn Val Val Ala Glu Asp Ala
            420                 425                 430
Gly Arg Tyr Thr Cys Glu Met Ser Asn Thr Leu Gly Thr Glu Arg Ala
        435                 440                 445
His Ser Gln Leu Ser Val Leu Pro Ala Ala Gly Cys Arg Lys Asp Gly
    450                 455                 460
Thr Thr Val Gly Ile Phe Thr Ile Ala Val Val Ser Ser Ile Val Leu
465                 470                 475                 480
Thr Ser Leu Val Trp Val Cys Ile Ile Tyr Gln Thr Arg Lys Lys Ser
                485                 490                 495
Glu Glu Tyr Ser Val Thr Asn Thr Asp Glu Thr Val Val Pro Pro Asp
            500                 505                 510
Val Pro Ser Tyr Leu Ser Ser Gln Gly Thr Leu Ser Asp Arg Gln Glu
        515                 520                 525
Thr Val Val Arg Thr Glu Gly Gly Pro Gln Ala Asn Gly His Ile Glu
    530                 535                 540
Ser Asn Gly Val Cys Pro Arg Asp Ala Ser His Phe Pro Glu Pro Asp
545                 550                 555                 560
Thr His Ser Val Ala Cys Arg Gln Pro Lys Leu Cys Ala Gly Ser Ala
                565                 570                 575
Tyr His Lys Lys Pro Trp Lys Ala Met Glu Lys Ala Glu Gly Thr Pro
            580                 585                 590
Gly Pro His Lys Met Glu His Gly Gly Arg Val Val Cys Ser Asp Cys
        595                 600                 605
Asn Thr Glu Val Asp Cys Tyr Ser Arg Gly Gln Ala Phe His Pro Gln
    610                 615                 620
Pro Val Ser Arg Asp Ser Ala Gln Pro Ser Ala Pro Asn Gly Pro Glu
625                 630                 635                 640
Pro Gly Gly Ser Asp Gln Glu His Ser Pro His His Gln Cys Ser Arg
                645                 650                 655
Thr Ala Ala Gly Ser Cys Pro Glu Cys Gln Gly Ser Leu Tyr Pro Ser
            660                 665                 670
Asn His Asp Arg Met Leu Thr Ala Val Lys Lys Lys Pro Met Ala Ser
        675                 680                 685
Leu Asp Gly Lys Gly Asp Ser Ser Trp Thr Leu Ala Arg Leu Tyr His
    690                 695                 700
Pro Asp Ser Thr Glu Leu Gln Pro Ala Ser Ser Leu Thr Ser Gly Ser
705                 710                 715                 720
Pro Glu Arg Ala Glu Ala Gln Tyr Leu Leu Val Ser Asn Gly His Leu
                725                 730                 735
Pro Lys Ala Cys Asp Ala Ser Pro Glu Ser Thr Pro Leu Thr Gly Gln
            740                 745                 750
Leu Pro Gly Lys Gln Arg Val Pro Leu Leu Leu Ala Pro Lys Ser
        755                 760                 765     767
```

<210> 1212
<211> 821
<212>Amino acid
<213> Homo sapiens

<400> 1212
Ala Ala Ala Gly Ala Ala Arg Arg Val Ser Val Arg Cys Gly Arg Ser
1 5 10 15
Gly Pro Gly Pro Gly Arg Gly Ala Ala Gly Leu Ser Pro Ala Asp Ile
20 25 30
Ala Leu Ala Ser Glu Gln Gly Ala Ser Cys Ser Val Arg Ala Pro Glu
35 40 45
Arg Lys Leu Arg Met Lys Leu Leu Trp Gln Ala Lys Met Ser Ser Ile
50 55 60
Gln Asp Trp Gly Glu Glu Val Glu Glu Gly Ala Val Tyr His Val Thr
65 70 75 80
Leu Lys Arg Val Gln Ile Gln Gln Ala Ala Asn Lys Gly Ala Arg Trp
85 90 95
Leu Gly Val Glu Gly Asp Gln Leu Pro Pro Gly His Thr Val Ser Gln
100 105 110
Tyr Glu Thr Cys Lys Ile Arg Thr Ile Lys Ala Gly Thr Leu Glu Lys
115 120 125
Leu Val Glu Asn Leu Leu Thr Ala Phe Gly Asp Asn Asp Phe Thr Tyr
130 135 140
Ile Ser Ile Phe Leu Ser Thr Tyr Arg Gly Phe Ala Ser Thr Lys Glu
145 150 155 160
Val Leu Glu Leu Leu Leu Asp Arg Tyr Gly Asn Leu Thr Ser Pro Asn
165 170 175
Cys Glu Glu Asp Gly Ser Gln Ser Ser Ser Glu Ser Lys Met Val Ile
180 185 190
Arg Asn Ala Ile Ala Ser Ile Leu Arg Ala Trp Leu Asp Gln Cys Ala
195 200 205
Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys Leu Gln Lys Leu Leu
210 215 220
Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp Pro Glu Arg Arg Ala
225 230 235 240
Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu Val Glu Thr Asp Asn
245 250 255
Gly Leu Pro Asn Thr Ile Ser Phe Ser Leu Glu Glu Glu Glu Glu Leu
260 265 270
Glu Gly Gly Glu Ser Ala Glu Phe Thr Cys Phe Ser Glu Asp Leu Val
275 280 285
Ala Glu Gln Leu Thr Tyr Met Asp Ala Gln Leu Phe Lys Lys Val Val
290 295 300
Pro His His Cys Leu Gly Cys Ile Trp Ser Arg Arg Asp Lys Lys Glu
305 310 315 320
Asn Lys His Leu Ala Pro Thr Ile Arg Ala Thr Ile Ser Gln Phe Asn
325 330 335
Thr Leu Thr Lys Cys Val Val Ser Thr Ile Leu Gly Gly Lys Glu Leu
340 345 350
Lys Thr Gln Gln Arg Ala Lys Ile Ile Glu Lys Trp Ile Asn Ile Ala
355 360 365
His Glu Cys Arg Leu Leu Lys Asn Phe Ser Ser Leu Arg Ala Ile Val
370 375 380
Ser Ala Leu Gln Ser Asn Ser Ile Tyr Arg Leu Lys Lys Thr Trp Ala
385 390 395 400
Ala Val Pro Arg Asp Arg Met Leu Met Phe Glu Glu Leu Ser Asp Ile
405 410 415
Phe Ser Asp His Asn Asn His Leu Thr Ser Arg Glu Leu Leu Met Lys
420 425 430
Glu Gly Thr Ser Lys Phe Ala Asn Leu Asp Ser Ser Val Lys Glu Asn
435 440 445
Gln Lys Arg Thr Gln Arg Arg Leu Gln Leu Gln Lys Asp Met Gly Val
450 455 460
Met Gln Gly Thr Val Pro Tyr Leu Gly Thr Phe Leu Thr Asp Leu Thr
465 470 475 480
Met Leu Asp Thr Ala Leu Gln Asp Tyr Ile Glu Gly Gly Leu Ile Asn
485 490 495
Phe Glu Lys Arg Arg Arg Glu Phe Glu Val Ile Ala Gln Ile Lys Leu

```
                500                 505                 510
Leu Gln Ser Ala Cys Asn Ser Tyr Cys Met Thr Pro Asp Gln Lys Phe
        515                 520                 525
Ile Gln Trp Phe Gln Arg Gln Gln Leu Leu Thr Glu Glu Glu Ser Tyr
    530                 535                 540
Ala Leu Ser Cys Glu Ile Glu Ala Ala Ala Asp Ala Ser Thr Thr Ser
545                 550                 555                 560
Pro Lys Pro Trp Lys Ser Met Val Lys Arg Leu Asn Leu Leu Phe Leu
                565                 570                 575
Gly Ala Asp Met Ile Thr Ser Pro Thr Pro Thr Lys Glu Gln Pro Lys
            580                 585                 590
Ser Thr Ala Ser Gly Ser Ser Gly Glu Ser Met Asp Ser Val Ser Val
        595                 600                 605
Ser Ser Cys Glu Ser Asn His Ser Glu Ala Glu Glu Gly Tyr Ile Thr
    610                 615                 620
Pro Met Asp Thr Pro Asp Glu Pro Gln Lys Lys Leu Ser Glu Ser Ser
625                 630                 635                 640
Ser Tyr Cys Ser Ser Ile His Ser Met Asp Thr Asn Phe Leu Gln Gly
                645                 650                 655
Met Ser Ser Leu Ile Asn Pro Leu Ser Ser Pro Pro Ser Cys Asn Asn
            660                 665                 670
Asn Pro Lys Ile His Lys Arg Ser Val Ser Val Thr Ser Ile Thr Ser
        675                 680                 685
Thr Val Leu Pro Pro Val Tyr Asn Gln Gln Asn Glu Asp Thr Cys Ile
    690                 695                 700
Ile Arg Ile Ser Val Glu Asp Asn Asn Gly Asn Met Tyr Lys Ser Ile
705                 710                 715                 720
Met Leu Thr Ser Gln Asp Lys Thr Pro Ala Val Ile Gln Arg Ala Met
                725                 730                 735
Leu Lys His Asn Leu Asp Ser Asp Pro Ala Glu Glu Tyr Glu Leu Val
            740                 745                 750
Gln Val Ile Ser Glu Asp Lys Glu Leu Val Ile Pro Asp Ser Ala Asn
        755                 760                 765
Val Phe Tyr Ala Met Asn Ser Gln Val Asn Phe Asp Phe Ile Leu Arg
    770                 775                 780
Lys Lys Asn Ser Met Glu Glu Gln Val Lys Leu Arg Ser Arg Thr Ser
785                 790                 795                 800
Leu Thr Leu Pro Arg Thr Ala Lys Arg Gly Cys Trp Ser Asn Arg His
                805                 810                 815
Ser Lys Ile Thr Leu
            820 821
```

<210> 1213
<211> 289
<212>Amino acid
<213> Homo sapiens

<400> 1213

```
Ala Arg Glu Lys Met Asp Ser Cys Ile Glu Ala Phe Gly Thr Thr Lys
  1               5                  10                  15
Gln Lys Arg Ala Leu Asn Thr Arg Arg Met Asn Arg Val Gly Asn Glu
             20                  25                  30
Ser Leu Asn Arg Ala Val Ala Lys Ala Ala Glu Thr Ile Ile Asp Thr
         35                  40                  45
Lys Gly Val Thr Ala Leu Val Ser Asp Ala Ile His Asn Asp Leu Gln
     50                  55                  60
Asp Asp Ser Leu Tyr Leu Pro Pro Cys Tyr Asp Asp Ala Ala Lys Pro
 65                  70                  75                  80
Glu Asp Val Tyr Lys Phe Glu Asp Leu Leu Ser Pro Ala Glu Tyr Glu
```

```
                  85                  90                  95
Ala Leu Gln Ser Pro Ser Glu Ala Phe Arg Asn Val Thr Ser Glu Glu
             100                 105                 110
Ile Leu Lys Met Ile Glu Glu Asn Ser His Cys Thr Phe Val Ile Glu
         115                 120                 125
Ala Leu Lys Ser Leu Pro Ser Asp Val Glu Ser Arg Asp Arg Gln Ala
     130                 135                 140
Arg Cys Ile Trp Phe Leu Asp Thr Leu Ile Lys Phe Arg Ala His Arg
145                 150                 155                 160
Val Val Lys Arg Lys Ser Ala Leu Gly Pro Gly Val Pro His Ile Ile
                165                 170                 175
Asn Thr Lys Leu Leu Lys His Phe Thr Cys Leu Thr Tyr Asn Asn Gly
             180                 185                 190
Arg Leu Arg Asn Leu Ile Ser Asp Ser Met Lys Ala Lys Ile Thr Ala
         195                 200                 205
Tyr Val Ile Ile Leu Ala Leu His Ile His Asp Phe Gln Ile Asp Leu
     210                 215                 220
Thr Val Leu Gln Arg Asp Leu Lys Leu Ser Glu Lys Arg Met Met Glu
225                 230                 235                 240
Ile Ala Lys Ala Met Arg Leu Lys Ile Ser Lys Arg Arg Val Ser Val
                245                 250                 255
Ala Ala Gly Ser Glu Glu Asp His Lys Leu Gly Thr Leu Ser Leu Pro
             260                 265                 270
Leu Pro Pro Ala Gln Thr Ser Asp Arg Leu Ala Lys Arg Arg Lys Ile
         275                 280                 285
Thr
289
```

<210> 1214
<211> 873
<212>Amino acid
<213> Homo sapiens

<400> 1214

```
Leu Ser Leu Phe Gly Ser Arg Ala Leu Gly Arg Ser Gly Ala Arg Ala
  1               5                  10                  15
Met Ala Lys Ala Lys Lys Val Gly Ala Arg Arg Lys Ala Ser Gly Ala
             20                  25                  30
Pro Ala Gly Ala Arg Gly Gly Pro Ala Lys Ala Asn Ser Asn Pro Phe
         35                  40                  45
Glu Val Lys Val Asn Arg Gln Lys Phe Gln Ile Leu Gly Arg Lys Thr
     50                  55                  60
Arg His Asp Val Gly Leu Pro Gly Val Ser Arg Ala Arg Ala Leu Arg
 65                  70                  75                  80
Lys Arg Thr Gln Thr Leu Leu Lys Glu Tyr Lys Glu Arg Asp Lys Ser
                 85                  90                  95
Asn Val Phe Arg Asp Lys Arg Phe Gly Glu Tyr Asn Ser Asn Met Ser
             100                 105                 110
Pro Glu Glu Lys Met Met Lys Arg Phe Ala Leu Glu Gln Gln Arg His
         115                 120                 125
His Glu Lys Lys Ser Ile Tyr Asn Leu Asn Glu Asp Glu Glu Leu Thr
     130                 135                 140
His Tyr Gly Gln Ser Leu Ala Asp Ile Glu Lys His Asn Asp Ile Val
145                 150                 155                 160
Asp Ser Asp Ser Asp Ala Glu Asp Arg Gly Thr Leu Ser Gly Glu Leu
                165                 170                 175
Thr Ala Ala His Phe Gly Gly Gly Gly Gly Leu Leu His Lys Lys Thr
             180                 185                 190
Gln Gln Glu Gly Glu Glu Arg Glu Lys Pro Lys Ser Arg Lys Glu Leu
```

```
        195                 200                 205
Ile Glu Glu Leu Ile Ala Lys Ser Lys Gln Glu Lys Arg Glu Arg Gln
    210                 215                 220
Ala Gln Arg Glu Asp Ala Leu Glu Leu Thr Glu Lys Leu Asp Gln Asp
225                 230                 235                 240
Trp Lys Glu Ile Gln Thr Leu Leu Ser His Lys Thr Pro Lys Ser Glu
                245                 250                 255
Asn Arg Asp Lys Lys Glu Lys Pro Lys Pro Asp Ala Tyr Asp Met Met
            260                 265                 270
Val Arg Glu Leu Gly Phe Glu Met Lys Ala Gln Pro Ser Asn Arg Met
        275                 280                 285
Lys Thr Glu Ala Glu Leu Ala Lys Glu Glu Gln Glu His Leu Arg Lys
    290                 295                 300
Leu Glu Ala Glu Arg Leu Arg Arg Met Leu Gly Lys Asp Glu Asp Glu
305                 310                 315                 320
Asn Val Lys Lys Pro Lys His Met Ser Ala Asp Asp Leu Asn Asp Gly
                325                 330                 335
Phe Val Leu Asp Lys Asp Asp Arg Arg Leu Leu Ser Tyr Lys Asp Gly
            340                 345                 350
Lys Met Asn Val Glu Glu Asp Val Gln Glu Glu Gln Ser Lys Glu Ala
        355                 360                 365
Ser Asp Pro Glu Ser Asn Glu Glu Glu Gly Asp Ser Ser Gly Gly Glu
    370                 375                 380
Asp Thr Glu Glu Ser Asp Ser Pro Asp Ser His Leu Asp Leu Glu Ser
385                 390                 395                 400
Asn Val Glu Ser Glu Glu Glu Asn Glu Lys Pro Ala Lys Glu Gln Arg
                405                 410                 415
Gln Thr Pro Gly Lys Gly Leu Ile Ser Gly Lys Glu Arg Ala Gly Lys
            420                 425                 430
Ala Thr Arg Asp Glu Leu Pro Tyr Thr Phe Ala Ala Pro Glu Ser Tyr
        435                 440                 445
Glu Glu Leu Arg Ser Leu Leu Leu Gly Arg Ser Met Glu Glu Gln Leu
    450                 455                 460
Leu Val Val Glu Arg Ile Gln Lys Cys Asn His Pro Ser Leu Ala Glu
465                 470                 475                 480
Gly Asn Lys Ala Lys Leu Glu Lys Leu Phe Gly Phe Leu Leu Glu Tyr
                485                 490                 495
Val Gly Asp Leu Ala Thr Asp Asp Pro Pro Asp Leu Thr Val Ile Asp
            500                 505                 510
Lys Leu Val Val His Leu Tyr His Leu Cys Gln Met Phe Pro Glu Ser
        515                 520                 525
Ala Ser Asp Ala Ile Lys Phe Val Leu Arg Asp Ala Met His Glu Met
    530                 535                 540
Glu Glu Met Ile Glu Thr Lys Gly Arg Ala Ala Leu Pro Gly Leu Asp
545                 550                 555                 560
Val Leu Ile Tyr Leu Lys Ile Thr Gly Leu Leu Phe Pro Thr Ser Asp
                565                 570                 575
Phe Trp His Pro Val Val Thr Pro Ala Leu Val Cys Leu Ser Gln Leu
            580                 585                 590
Leu Thr Lys Cys Pro Ile Leu Ser Leu Gln Asp Val Val Lys Gly Leu
        595                 600                 605
Phe Val Cys Cys Leu Phe Leu Glu Tyr Val Ala Leu Ser Gln Arg Phe
    610                 615                 620
Ile Pro Glu Leu Ile Asn Phe Leu Leu Gly Ile Leu Tyr Ile Ala Thr
625                 630                 635                 640
Pro Asn Lys Ala Ser Gln Gly Ser Thr Leu Val His Pro Phe Arg Ala
                645                 650                 655
Leu Gly Lys Asn Ser Glu Leu Leu Val Val Ser Ala Arg Glu Asp Val
            660                 665                 670
Ala Thr Trp Gln Gln Ser Ser Leu Ser Leu Arg Trp Ala Ser Arg Leu
        675                 680                 685
Arg Ala Pro Thr Ser Thr Glu Ala Asn His Ile Arg Leu Ser Cys Leu
    690                 695                 700
Ala Val Gly Leu Ala Leu Leu Lys Arg Cys Val Leu Met Tyr Gly Ser
```

```
705                 710                 715                 720
Leu Pro Ser Phe His Ala Ile Met Gly Pro Leu Arg Ala Leu Leu Thr
                725                 730                 735
Asp His Leu Ala Asp Cys Ser His Pro Gln Glu Leu Gln Glu Leu Cys
            740                 745                 750
Gln Ser Thr Leu Thr Glu Met Glu Ser Gln Lys Gln Leu Cys Arg Pro
        755                 760                 765
Leu Thr Cys Glu Lys Ser Lys Pro Val Pro Leu Lys Leu Phe Thr Pro
    770                 775                 780
Arg Leu Val Lys Val Leu Glu Phe Gly Arg Lys Gln Gly Ser Ser Lys
785                 790                 795                 800
Glu Glu Gln Glu Arg Lys Arg Leu Ile His Lys His Lys Arg Glu Phe
                805                 810                 815
Lys Gly Ala Val Arg Glu Ile Arg Lys Asp Asn Gln Phe Leu Ala Arg
            820                 825                 830
Met Gln Leu Ser Glu Ile Met Glu Arg Asp Ala Glu Arg Lys Arg Lys
        835                 840                 845
Val Lys Gln Leu Phe Asn Ser Leu Ala Thr Gln Glu Gly Glu Trp Lys
    850                 855                 860
Ala Leu Lys Arg Lys Lys Phe Lys Lys
865                 870         873
```

<210> 1215
<211> 319
<212>Amino acid
<213> Homo sapiens

<400> 1215

```
Leu Thr Lys Gln Glu Asp Cys Cys Gly Ser Ile Gly Thr Ala Trp Gly
  1               5                  10                  15
Gln Ser Lys Cys His Lys Cys Pro Gln Leu Gln Tyr Thr Gly Val Gln
             20                  25                  30
Lys Pro Gly Pro Val Arg Gly Glu Val Gly Ala Asp Cys Pro Gln Gly
         35                  40                  45
Tyr Lys Arg Leu Asn Ser Thr His Cys Gln Asp Ile Asn Glu Cys Ala
     50                  55                  60
Met Pro Gly Val Cys Arg His Gly Asp Cys Leu Asn Asn Pro Gly Ser
 65                  70                  75                  80
Tyr Arg Cys Val Cys Pro Pro Gly His Ser Leu Gly Pro Ser Arg Thr
                 85                  90                  95
Gln Cys Ile Ala Asp Lys Pro Glu Glu Lys Ser Leu Cys Phe Arg Leu
            100                 105                 110
Val Ser Pro Glu His Gln Cys Gln His Pro Leu Thr Thr Arg Leu Thr
        115                 120                 125
Arg Gln Leu Cys Cys Cys Ser Val Gly Lys Ala Trp Gly Ala Arg Cys
    130                 135                 140
Gln Arg Cys Pro Thr Asp Gly Thr Ala Ala Phe Lys Glu Ile Cys Pro
145                 150                 155                 160
Ala Gly Lys Gly Tyr His Ile Leu Thr Ser His Gln Thr Leu Thr Ile
                165                 170                 175
Gln Gly Glu Ser Asp Phe Ser Leu Phe Leu His Pro Asp Gly Pro Pro
            180                 185                 190
Lys Pro Gln Gln Leu Pro Glu Ser Pro Ser Gln Ala Pro Pro Pro Glu
        195                 200                 205
Asp Thr Glu Glu Glu Arg Gly Val Thr Thr Asp Ser Pro Val Ser Glu
    210                 215                 220
Glu Arg Ser Val Gln Gln Ser His Pro Thr Ala Thr Thr Thr Pro Ala
225                 230                 235                 240
Arg Pro Tyr Pro Glu Leu Ile Ser Arg Pro Ser Pro Pro Thr Met Arg
```

```
                245                 250                 255
Trp Phe Leu Pro Asp Leu Pro Pro Ser Arg Ser Ala Val Glu Ile Ala
            260                 265                 270
Pro Thr Gln Val Thr Glu Thr Asp Glu Cys Arg Leu Asn Gln Asn Ile
        275                 280                 285
Cys Gly His Gly Glu Cys Val Pro Gly Pro Pro Asp Tyr Ser Cys His
    290                 295                 300
Cys Asn Pro Gly Tyr Arg Ser His Pro Gln His Arg Tyr Cys Val
305                 310                 315             319
```

<210> 1216
<211> 815
<212>Amino acid
<213> Homo sapiens

<400> 1216

```
Met Ala Gly Gly His Cys Gly Ser Phe Pro Ala Ala Ala Ala Gly Ser
  1               5                  10                  15
Gly Glu Ile Val Gln Leu Asn Val Gly Gly Thr Arg Phe Ser Thr Ser
             20                  25                  30
Arg Gln Thr Leu Met Trp Ile Pro Asp Ser Phe Phe Ser Ser Leu Leu
         35                  40                  45
Ser Gly Arg Ile Ser Thr Leu Arg Asp Glu Thr Gly Ala Ile Phe Ile
     50                  55                  60
Asp Arg Asp Pro Ala Ala Phe Ala Pro Ile Leu Asn Phe Leu Arg Thr
 65                  70                  75                  80
Lys Glu Leu Asp Leu Arg Gly Val Ser Ile Asn Val Leu Arg His Glu
                 85                  90                  95
Ala Glu Phe Tyr Gly Ile Thr Pro Leu Val Arg Arg Leu Leu Leu Cys
            100                 105                 110
Glu Glu Leu Glu Arg Ser Ser Cys Gly Ser Val Leu Phe His Gly Tyr
        115                 120                 125
Leu Pro Pro Pro Gly Ile Pro Ser Arg Lys Ile Asn Asn Thr Val Arg
    130                 135                 140
Ser Ala Asp Ser Arg Asn Gly Leu Asn Ser Thr Glu Gly Glu Ala Arg
145                 150                 155                 160
Gly Asn Gly Thr Gln Pro Val Leu Ser Gly Thr Gly Glu Glu Thr Val
                165                 170                 175
Arg Leu Gly Phe Pro Val Asp Pro Arg Lys Val Leu Ile Val Ala Gly
            180                 185                 190
His His Asn Trp Ile Val Ala Ala Tyr Ala His Phe Ala Val Trp Tyr
        195                 200                 205
Arg Ile Lys Glu Ser Ser Gly Trp Gln Gln Val Phe Thr Ser Pro Tyr
    210                 215                 220
Leu Asp Trp Thr Ile Glu Arg Val Ala Leu Asn Ala Lys Val Val Gly
225                 230                 235                 240
Gly Pro His Gly Asp Lys Asp Lys Met Val Ala Val Ala Ser Glu Ser
                245                 250                 255
Ser Ile Ile Leu Trp Ser Val Gln Asp Gly Gly Ser Gly Ser Glu Ile
            260                 265                 270
Gly Val Phe Ser Leu Gly Val Pro Val Asp Ala Leu Phe Phe Ile Gly
        275                 280                 285
Asn Gln Leu Val Ala Thr Ser His Thr Gly Lys Val Gly Val Trp Asn
    290                 295                 300
Ala Val Thr Gln His Trp Gln Val Gln Asp Val Val Pro Ile Thr Ser
305                 310                 315                 320
Tyr Asp Thr Ala Gly Ser Phe Leu Leu Leu Gly Cys Asn Asn Gly Ser
                325                 330                 335
Ile Tyr Tyr Ile Asp Met Gln Lys Phe Pro Leu Arg Met Lys Asp Asn
```

```
            340                 345                 350
Asp Leu Leu Val Thr Glu Leu Tyr His Asp Pro Ser Asn Asp Ala Ile
        355                 360                 365
Thr Ala Leu Ser Val Tyr Leu Thr Pro Lys Thr Ser Val Ser Gly Asn
    370                 375                 380
Trp Ile Glu Ile Ala Tyr Gly Thr Ser Ser Gly Ala Val Arg Val Ile
385                 390                 395                 400
Val Gln His Pro Glu Thr Val Gly Ser Gly Pro Gln Leu Phe Gln Thr
                405                 410                 415
Phe Thr Val His Arg Ser Pro Val Thr Lys Ile Met Leu Ser Glu Lys
            420                 425                 430
His Leu Val Ser Val Cys Ala Asp Asn Asn His Val Arg Thr Trp Thr
        435                 440                 445
Val Thr Arg Phe Arg Gly Met Ile Ser Thr Gln Pro Gly Ser Thr Pro
    450                 455                 460
Leu Ala Ser Phe Lys Ile Leu Ser Leu Glu Glu Thr Glu Ser His Gly
465                 470                 475                 480
Ser Tyr Ser Ser Gly Asn Asp Ile Gly Pro Phe Gly Glu Arg Asp Asp
                485                 490                 495
Gln Gln Val Phe Ile Gln Lys Val Val Pro Ile Thr Asn Lys Leu Phe
            500                 505                 510
Val Arg Leu Ser Ser Thr Gly Lys Arg Ile Cys Glu Ile Gln Ala Val
        515                 520                 525
Asp Cys Thr Thr Ile Ser Ser Phe Thr Gly Arg Glu Cys Glu Gly Ser
    530                 535                 540
Ser Arg Met Gly Ser Arg Pro Arg Arg Tyr Leu Phe Thr Gly His Thr
545                 550                 555                 560
Asn Gly Ser Ile Gln Met Trp Asp Leu Thr Thr Ala Met Asp Met Val
                565                 570                 575
Asn Lys Ser Glu Asp Lys Asp Val Gly Gly Pro Thr Glu Glu Glu Leu
            580                 585                 590
Leu Lys Leu Leu Asp Gln Cys Asp Leu Ser Thr Ser Arg Cys Ala Thr
        595                 600                 605
Pro Asn Ile Ser Pro Ala Thr Ser Val Val Gln His Ser His Leu Arg
    610                 615                 620
Glu Ser Asn Ser Ser Leu Gln Leu Gln His His Asp Thr Thr His Glu
625                 630                 635                 640
Ala Ala Thr Tyr Gly Ser Met Arg Pro Tyr Arg Glu Ser Pro Leu Leu
                645                 650                 655
Ala Arg Ala Arg Arg Thr Glu Ser Phe His Ser Tyr Arg Asp Phe Gln
            660                 665                 670
Thr Ile Asn Leu Asn Arg Asn Val Glu Arg Ala Val Pro Glu Asn Gly
        675                 680                 685
Asn Leu Gly Pro Ile Gln Ala Glu Val Lys Gly Ala Thr Gly Glu Cys
    690                 695                 700
Asn Ile Ser Glu Arg Lys Ser Pro Gly Val Glu Ile Lys Ser Leu Arg
705                 710                 715                 720
Glu Leu Asp Ser Gly Leu Glu Val His Lys Ile Ala Glu Gly Phe Ser
                725                 730                 735
Glu Ser Lys Lys Arg Ser Ser Glu Asp Glu Asn Glu Asn Lys Ile Glu
            740                 745                 750
Phe Arg Lys Lys Gly Gly Phe Glu Gly Gly Gly Phe Leu Gly Arg Lys
        755                 760                 765
Lys Val Pro Tyr Leu Ala Ser Ser Pro Ser Thr Ser Asp Gly Gly Thr
    770                 775                 780
Asp Ser Pro Gly Thr Ala Ser Pro Ser Pro Thr Lys Thr Thr Pro Ser
785                 790                 795                 800
Pro Arg His Lys Lys Ser Asp Ser Ser Gly Gln Glu Tyr Ser Leu
                805                 810                 815
```

<210> 1217
<211> 459
<212>Amino acid

<213> Homo sapiens

<400> 1217

```
Arg Arg Pro Thr Arg Pro Ile Leu Thr Asp Glu Leu Phe Lys Arg Thr
 1               5                  10                  15
Ile Gln Leu Pro His Leu Lys Thr Leu Ile Leu Asn Gly Asn Lys Leu
            20                  25                  30
Glu Thr Leu Ser Leu Val Ser Cys Phe Ala Asn Asn Thr Pro Leu Glu
        35                  40                  45
His Leu Asp Leu Ser Gln Asn Leu Leu Gln His Lys Asn Asp Glu Asn
    50                  55                  60
Cys Ser Trp Pro Glu Thr Val Val Asn Met Asn Leu Ser Tyr Asn Lys
65                  70                  75                  80
Leu Ser Asp Ser Val Phe Arg Cys Leu Pro Lys Ser Ile Gln Ile Leu
                85                  90                  95
Asp Leu Asn Asn Asn Gln Ile Gln Thr Val Pro Lys Glu Thr Ile His
            100                 105                 110
Leu Met Ala Leu Arg Glu Leu Asn Ile Ala Phe Asn Phe Leu Thr Asp
        115                 120                 125
Leu Pro Gly Cys Ser His Phe Ser Arg Leu Ser Val Leu Asn Ile Glu
    130                 135                 140
Met Asn Phe Ile Leu Ser Pro Ser Leu Asp Phe Val Gln Ser Cys Gln
145                 150                 155                 160
Glu Val Lys Thr Leu Asn Ala Gly Arg Asn Pro Phe Arg Cys Thr Cys
                165                 170                 175
Glu Leu Lys Asn Phe Ile Gln Leu Glu Thr Tyr Ser Glu Val Met Met
            180                 185                 190
Val Gly Trp Ser Asp Ser Tyr Thr Cys Glu Tyr Pro Leu Asn Leu Arg
        195                 200                 205
Gly Thr Arg Leu Lys Asp Val His Leu His Glu Leu Ser Cys Asn Thr
    210                 215                 220
Ala Leu Leu Ile Val Thr Ile Val Val Ile Met Leu Val Leu Gly Leu
225                 230                 235                 240
Ala Val Ala Phe Cys Cys Leu His Phe Asp Leu Pro Trp Tyr Leu Arg
                245                 250                 255
Met Leu Gly Gln Cys Thr Gln Thr Trp His Arg Val Arg Lys Thr Thr
            260                 265                 270
Gln Glu Gln Leu Lys Arg Asn Val Arg Phe His Ala Phe Ile Ser Tyr
        275                 280                 285
Ser Glu His Asp Ser Leu Trp Val Lys Asn Glu Leu Ile Pro Asn Leu
    290                 295                 300
Glu Lys Glu Asp Gly Ser Ile Leu Ile Cys Leu Tyr Glu Ser Tyr Phe
305                 310                 315                 320
Asp Pro Gly Lys Ser Ile Ser Glu Asn Ile Val Ser Phe Ile Glu Lys
                325                 330                 335
Ser Tyr Lys Ser Ile Phe Val Leu Ser Pro Asn Phe Val Gln Asn Glu
            340                 345                 350
Trp Cys His Tyr Glu Phe Tyr Phe Ala His His Asn Leu Phe His Glu
        355                 360                 365
Asn Ser Asp His Ile Ile Leu Ile Leu Leu Glu Pro Ile Pro Phe Tyr
    370                 375                 380
Cys Ile Pro Thr Arg Tyr His Lys Leu Lys Ala Leu Leu Glu Lys Lys
385                 390                 395                 400
Ala Tyr Leu Glu Trp Pro Lys Asp Arg Arg Lys Cys Gly Leu Phe Trp
                405                 410                 415
Ala Asn Leu Arg Ala Ala Ile Asn Val Asn Val Leu Ala Thr Arg Glu
            420                 425                 430
Met Tyr Glu Leu Gln Thr Phe Thr Glu Leu Asn Glu Glu Ser Arg Gly
        435                 440                 445
Ser Thr Ile Ser Leu Met Arg Thr Asp Cys Leu
```

450 455 459

<210> 1218
<211> 366
<212>Amino acid
<213> Homo sapiens

<400> 1218

```
Pro Thr Arg Pro Pro Thr Arg Pro Pro Thr Arg Pro Leu Leu Thr Pro
 1               5                  10                  15
Ser Trp Thr Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu
            20                  25                  30
Phe Trp Ser Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp
        35                  40                  45
Cys Glu Ala Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser
    50                  55                  60
Lys Thr Lys Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser
65                  70                  75                  80
His Lys Asn Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys
                85                  90                  95
Thr His Leu Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn
            100                 105                 110
Leu Ser Ile Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala
        115                 120                 125
Gln Val Thr Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile
    130                 135                 140
Val Asp Pro Val Thr Ser Pro Val Leu Asn Ile Met Val Ile Gln Thr
145                 150                 155                 160
Glu Thr Asp Arg His Ile Thr Leu His Cys Leu Ser Val Asn Gly Ser
                165                 170                 175
Leu Pro Ile Asn Tyr Thr Phe Phe Glu Asn His Val Ala Ile Ser Pro
            180                 185                 190
Ala Ile Ser Lys Tyr Asp Arg Glu Pro Ala Glu Phe Asn Leu Thr Lys
        195                 200                 205
Lys Asn Pro Gly Glu Glu Glu Glu Tyr Arg Cys Glu Ala Lys Asn Arg
    210                 215                 220
Leu Pro Asn Tyr Ala Thr Tyr Ser His Pro Val Thr Met Pro Ser Thr
225                 230                 235                 240
Gly Gly Asp Ser Cys Pro Phe Cys Leu Lys Leu Leu Leu Pro Gly Leu
                245                 250                 255
Leu Leu Leu Leu Val Val Ile Ile Leu Ile Leu Ala Phe Trp Val Leu
            260                 265                 270
Pro Lys Tyr Lys Thr Arg Lys Ala Met Arg Asn Asn Val Pro Arg Asp
        275                 280                 285
Arg Gly Asp Thr Ala Met Glu Val Gly Ile Tyr Ala Asn Ile Leu Glu
    290                 295                 300
Lys Gln Ala Lys Glu Glu Ser Val Pro Glu Val Gly Ser Arg Pro Cys
305                 310                 315                 320
Val Ser Thr Ala Gln Asp Glu Ala Lys His Ser Gln Glu Leu Gln Tyr
                325                 330                 335
Ala Thr Pro Val Phe Gln Glu Val Ala Pro Arg Glu Gln Glu Ala Cys
            340                 345                 350
Asp Ser Tyr Lys Ser Gly Tyr Val Tyr Ser Glu Leu Asn Phe
        355                 360                 365 366
```

<210> 1219
<211> 97
<212>Amino acid

<213> Homo sapiens

<400> 1219

```
Phe Phe Phe Phe Glu Glu Arg Arg Thr Gly Ser His Ser Val Gly His
 1               5                  10                  15
Pro Arg Met Glu Tyr Ser Gly Val Ser Met Ala His Cys Ser Leu Asn
            20                  25                  30
Leu Leu Gly Ser Ser Asn Ser Pro Ser Ser Ala Ser Gln Asp Ala Arg
        35                  40                  45
Thr Thr Gly Ala Cys Gln His Ala Gln Leu Ile Gly Phe Phe Phe Phe
    50                  55                  60
Val Glu Thr Ala Ser Pro Gln Val Thr His Ala Gly Leu Lys His Leu
65                  70                  75                  80
Val Ser Arg Asn Pro Ser Ala Val Thr Ser Gln Ser Ala Arg Ile Lys
                85                  90                  95
Thr
97
```

<210> 1220
<211> 242
<212>Amino acid
<213> Homo sapiens

<400> 1220

```
Asn Arg Glu Gly Ala Arg Lys Ile Gln Asn Lys Trp Leu Arg Pro Ser
 1               5                  10                  15
Pro Arg Ser His Arg Thr Pro Glu Ser Val Ser Pro Glu Arg Tyr Ser
            20                  25                  30
Tyr Gly Thr Ser Ser Ser Ser Lys Arg Thr Glu Gly Ser Cys Arg Arg
        35                  40                  45
Arg Arg Gln Ser Ser Ser Ser Ala Asn Ser Gln Gln Gly Gln Trp Glu
    50                  55                  60
Thr Gly Ser Pro Pro Thr Lys Arg Gln Arg Arg Ser Arg Gly Arg Pro
65                  70                  75                  80
Ser Gly Gly Ala Lys Arg Arg Arg Arg Gly Ala Pro Ala Ala Pro Gln
                85                  90                  95
Gln Gln Ser Glu Pro Ala Arg Pro Ser Ser Glu Gly Lys Val Thr Cys
            100                 105                 110
Asp Ile Arg Leu Arg Val Arg Ala Glu Tyr Cys Glu His Gly Pro Ala
        115                 120                 125
Leu Glu Gln Gly Val Ala Ser Arg Arg Pro Gln Ala Leu Ala Arg Gln
    130                 135                 140
Leu Asp Val Phe Gly Gln Ala Thr Ala Val Leu Arg Ser Arg Asp Leu
145                 150                 155                 160
Gly Ser Val Val Cys Asp Ile Lys Phe Ser Glu Leu Ser Tyr Leu Asp
                165                 170                 175
Ala Phe Trp Gly Asp Tyr Leu Ser Gly Ala Leu Leu Gln Ala Leu Arg
            180                 185                 190
Gly Val Phe Leu Thr Glu Ala Leu Arg Glu Ala Val Gly Arg Glu Ala
        195                 200                 205
Val Arg Leu Leu Val Ser Val Asp Glu Ala Asp Tyr Glu Ala Gly Arg
    210                 215                 220
Arg Arg Leu Leu Leu Met Glu Glu Glu Gly Gly Arg Arg Pro Thr Glu
225                 230                 235                 240
Ala Ser
```

242

<210> 1221
<211> 440
<212>Amino acid
<213> Homo sapiens

<400> 1221

```
Ala Pro Asn Thr Ala Glu Leu Arg Ile Cys Arg Val Asn Lys Asn Cys
 1               5                  10                  15
Gly Ser Val Arg Gly Gly Asp Glu Ile Phe Leu Leu Cys Asp Lys Val
            20                  25                  30
Gln Lys Asp Asp Ile Glu Val Arg Phe Val Leu Asn Asp Trp Glu Ala
        35                  40                  45
Lys Gly Ile Phe Ser Gln Ala Asp Val His Arg Gln Val Ala Ile Val
    50                  55                  60
Phe Lys Thr Pro Pro Tyr Cys Lys Ala Ile Thr Glu Pro Val Thr Val
65                  70                  75                  80
Lys Met Gln Leu Arg Arg Pro Ser Asp Gln Glu Val Ser Glu Ser Met
                85                  90                  95
Asp Phe Arg Tyr Leu Pro Asp Glu Lys Asp Thr Tyr Gly Asn Lys Ala
            100                 105                 110
Lys Lys Gln Lys Thr Thr Leu Leu Phe Gln Lys Leu Cys Gln Asp His
        115                 120                 125
Val Glu Thr Gly Phe Arg His Val Asp Gln Asp Gly Leu Glu Leu Leu
    130                 135                 140
Thr Ser Gly Asp Pro Pro Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr
145                 150                 155                 160
Val Asn Phe Pro Glu Arg Pro Arg Pro Gly Leu Leu Gly Ser Ile Gly
                165                 170                 175
Glu Gly Arg Tyr Phe Lys Lys Glu Pro Asn Leu Phe Ser His Asp Ala
            180                 185                 190
Val Val Arg Glu Met Pro Thr Gly Val Ser Ser Gln Ala Glu Ser Tyr
        195                 200                 205
Tyr Pro Ser Pro Gly Pro Ile Ser Ser Gly Leu Ser His His Ala Ser
    210                 215                 220
Met Ala Pro Leu Pro Ser Ser Ser Trp Ser Ser Val Ala His Pro Thr
225                 230                 235                 240
Pro Arg Ser Gly Asn Thr Asn Pro Leu Ser Ser Phe Ser Thr Arg Thr
                245                 250                 255
Leu Pro Ser Asn Ser Gln Gly Ile Pro Pro Phe Leu Arg Ile Pro Val
            260                 265                 270
Gly Asn Asp Leu Asn Ala Ser Asn Ala Cys Ile Tyr Asn Asn Ala Asp
        275                 280                 285
Asp Ile Val Gly Met Glu Ala Ser Ser Met Pro Ser Ala Asp Leu Tyr
    290                 295                 300
Gly Ile Ser Asp Pro Asn Met Leu Ser Asn Cys Ser Val Asn Met Met
305                 310                 315                 320
Thr Thr Ser Ser Asp Ser Met Gly Glu Thr Asp Asn Pro Arg Leu Leu
                325                 330                 335
Ser Met Asn Leu Glu Asn Pro Ser Cys Asn Ser Val Leu Asp Pro Arg
            340                 345                 350
Asp Leu Arg Gln Leu His Gln Met Ser Ser Ser Ser Met Ser Ala Gly
        355                 360                 365
Ala Asn Ser Asn Thr Thr Val Phe Val Ser Gln Ser Asp Ala Phe Glu
    370                 375                 380
Gly Ser Asp Phe Ser Cys Ala Asp Asn Ser Met Ile Asn Glu Ser Gly
385                 390                 395                 400
Pro Ser Asn Ser Thr Asn Pro Asn Ser His Gly Phe Val Gln Asp Ser
```

```
                405                 410                 415
Gln Tyr Ser Gly Ile Gly Ser Met Gln Asn Glu Gln Leu Ser Asp Ser
            420                 425                 430
Phe Pro Tyr Glu Phe Phe Gln Val
        435                 440
```

<210> 1222
<211> 437
<212>Amino acid
<213> Homo sapiens

<400> 1222

```
Arg Arg Leu Ser Leu Leu Asp Leu Gln Leu Gly Pro Leu Gly Arg Asp
  1               5                  10                  15
Pro Pro Gln Glu Cys Ser Thr Phe Ser Pro Thr Asp Ser Gly Glu Glu
             20                  25                  30
Pro Gly Gln Leu Ser Pro Gly Val Gln Phe Gln Arg Arg Gln Asn Gln
         35                  40                  45
Arg Arg Phe Ser Met Glu Asp Val Ser Lys Arg Leu Ser Leu Pro Met
     50                  55                  60
Asp Ile Arg Leu Pro Gln Glu Phe Leu Gln Lys Leu Gln Met Glu Ser
 65                  70                  75                  80
Pro Asp Leu Pro Lys Pro Leu Ser Arg Met Ser Arg Arg Ala Ser Leu
                 85                  90                  95
Ser Asp Ile Gly Phe Gly Lys Leu Glu Thr Tyr Val Lys Leu Asp Lys
            100                 105                 110
Leu Gly Glu Gly Thr Tyr Ala Thr Val Phe Lys Gly Arg Ser Lys Leu
        115                 120                 125
Thr Glu Asn Leu Val Ala Leu Lys Glu Ile Arg Leu Glu His Glu Glu
    130                 135                 140
Gly Ala Pro Cys Thr Ala Ile Arg Glu Val Ser Leu Leu Lys Asn Leu
145                 150                 155                 160
Lys His Ala Asn Ile Val Thr Leu His Asp Leu Ile His Thr Asp Arg
                165                 170                 175
Ser Leu Thr Leu Val Phe Glu Tyr Leu Asp Ser Asp Leu Lys Gln Tyr
            180                 185                 190
Leu Asp His Cys Gly Asn Leu Met Ser Met His Asn Val Lys Ile Phe
        195                 200                 205
Met Phe Gln Leu Leu Arg Gly Leu Ala Tyr Cys His His Arg Lys Ile
    210                 215                 220
Leu His Arg Asp Leu Lys Pro Gln Asn Leu Leu Ile Asn Glu Arg Gly
225                 230                 235                 240
Glu Leu Lys Leu Ala Asp Phe Gly Leu Ala Arg Ala Lys Ser Val Pro
                245                 250                 255
Thr Lys Thr Tyr Ser Asn Glu Val Val Thr Leu Trp Tyr Arg Pro Pro
            260                 265                 270
Asp Val Leu Leu Gly Ser Thr Glu Tyr Ser Thr Pro Ile Asp Met Trp
        275                 280                 285
Gly Val Gly Cys Ile His Tyr Glu Met Ala Thr Gly Arg Pro Leu Phe
    290                 295                 300
Pro Gly Ser Thr Val Lys Glu Glu Leu His Lys Ile Asn Arg Leu Leu
305                 310                 315                 320
Gly Thr Pro Thr Glu Glu Thr Trp Pro Gly Val Thr Ala Phe Ser Glu
                325                 330                 335
Phe Arg Thr Tyr Ser Phe Pro Cys Tyr Leu Pro Gln Pro Leu Ile Asn
            340                 345                 350
His Ala Pro Arg Leu Asp Thr Asp Gly Ile His Leu Leu Ser Ser Leu
        355                 360                 365
Leu Leu Tyr Glu Ser Lys Ser Arg Met Ser Ala Glu Ala Ala Leu Ser
```

```
    370                 375                 380
His Ser Tyr Phe Arg Ser Leu Gly Glu Arg Val His Gln Leu Glu Asp
385                 390                 395                 400
Thr Ala Ser Ile Phe Ser Leu Lys Glu Ile Gln Leu Gln Lys Asp Pro
                405                 410                 415
Gly Tyr Arg Gly Leu Ala Phe Gln Gln Pro Gly Arg Gly Lys Asn Arg
            420                 425                 430
Arg Gln Ser Ile Phe
        435     437
```

<210> 1223
<211> 150
<212>Amino acid
<213> Homo sapiens

<400> 1223

```
Cys Thr Pro His Gly Ser Ser Ser Ser Trp Lys Ile Pro Leu Trp Pro
  1               5                  10                  15
Arg His Met Ser Pro Leu His Ser Cys Leu Pro Val Gly Thr Ser Thr
             20                  25                  30
Ser Ser Gly Pro Leu Ala Val Pro Arg Asp Cys Phe His Leu Cys Cys
         35                  40                  45
Leu Trp Gly Gln Leu Leu Leu Ile Ser Cys Pro Leu Ala Cys Gly Gln
     50                  55                  60
Gly Cys Arg Val Ala Gly Gly Gln Gln His Val Pro Gly Gln Ala Leu
 65                  70                  75                  80
Gly Thr Leu Ser Pro Leu Val Ser Leu Leu Thr Trp Ala Gly Pro Ser
                 85                  90                  95
Leu Asp Trp Pro His Pro Gly Ser Leu Val Thr Pro Arg Cys Pro Ile
            100                 105                 110
Leu Pro Ala Val Pro Val Leu Val Lys Gly Leu Gly Gly Trp Pro Pro
        115                 120                 125
Thr Arg Pro Ser Arg Ala Ala Pro Val Ser Gly Pro Trp Asp Gln Leu
    130                 135                 140
Pro Tyr Phe Pro Gly Leu
145                 150
```

<210> 1224
<211> 276
<212>Amino acid
<213> Homo sapiens

<400> 1224

```
Leu Ile Ser Pro Val Trp Gly Asn Ile Gln Arg Ser Arg Ser Val Pro
  1               5                  10                  15
Leu Phe Pro Ser Gly Leu Val Leu Gly Gly Ile Trp Ala Arg Gly Pro
             20                  25                  30
Leu Leu Ala Leu Leu Ala Ser Phe Asn Ile Ile Ser Val Leu Asn Ala
         35                  40                  45
Glu Cys Tyr Leu Lys Gln Ile Leu His Pro Thr Ser His Phe Thr Val
     50                  55                  60
Ser Glu Thr Pro Pro Leu Ser Gly Asn Asp Thr Asp Ser Leu Ser Cys
 65                  70                  75                  80
Asp Ser Gly Ser Ser Ala Thr Ser Thr Pro Cys Val Ser Arg Leu Val
```

```
                85                  90                  95
Thr Gly His His Leu Trp Ala Ser Lys Asn Gly Arg His Val Leu Gly
            100                 105                 110
Leu Ile Glu Asp Tyr Glu Ala Leu Leu Lys Gln Ile Ser Gln Gly Gln
        115                 120                 125
Arg Leu Leu Ala Glu Met Asp Ile Gln Thr Gln Glu Ala Pro Ser Ser
    130                 135                 140
Thr Ser Gln Glu Leu Gly Thr Lys Gly Pro His Pro Ala Pro Leu Ser
145                 150                 155                 160
Lys Phe Val Ser Ser Val Ser Thr Ala Lys Leu Thr Leu Glu Glu Ala
                165                 170                 175
Tyr Arg Arg Leu Lys Leu Leu Trp Arg Val Ser Leu Pro Glu Asp Gly
            180                 185                 190
Gln Cys Pro Leu His Cys Glu Gln Ile Gly Glu Met Lys Ala Glu Val
        195                 200                 205
Thr Lys Leu His Lys Lys Leu Phe Glu Gln Glu Lys Lys Leu Gln Asn
    210                 215                 220
Thr Met Lys Leu Leu Gln Leu Ser Lys Arg Gln Glu Lys Val Ile Phe
225                 230                 235                 240
Asp Gln Leu Val Val Thr His Lys Ile Leu Arg Lys Ala Arg Gly Asn
                245                 250                 255
Leu Glu Leu Arg Pro Gly Gly Ala His Pro Gly Thr Cys Ser Pro Ser
            260                 265                 270
Arg Pro Gly Ser
        275 276
```

<210> 1225
<211> 270
<212>Amino acid
<213> Homo sapiens

<400> 1225

```
Leu Gly Leu Phe Cys Ile Leu Pro Ile Asp Thr Leu Cys Ala Val Leu
  1               5                  10                  15
Glu Arg Asp Thr Leu Ser Ile Arg Glu Ser Arg Leu Phe Gly Ala Val
             20                  25                  30
Val Arg Trp Ala Glu Ala Glu Cys Gln Arg Gln Gln Leu Pro Val Thr
         35                  40                  45
Phe Gly Asn Lys Gln Lys Val Leu Gly Lys Ala Leu Ser Leu Ile Arg
     50                  55                  60
Phe Pro Leu Met Thr Ile Glu Glu Phe Ala Ala Gly Pro Ala Gln Ser
 65                  70                  75                  80
Gly Ile Leu Ser Asp Arg Glu Val Val Asn Leu Phe Leu His Phe Thr
                 85                  90                  95
Val Asn Pro Lys Pro Arg Val Glu Tyr Ile Asp Arg Pro Arg Cys Cys
            100                 105                 110
Leu Arg Gly Lys Glu Cys Cys Ile Asn Arg Phe Gln Gln Val Glu Ser
        115                 120                 125
Arg Trp Gly Tyr Ser Gly Thr Ser Asp Arg Ile Arg Phe Thr Val Asn
    130                 135                 140
Arg Arg Ile Ser Ile Val Gly Phe Gly Leu Tyr Gly Ser Ile His Gly
145                 150                 155                 160
Pro Thr Asp Tyr Gln Val Asn Ile Gln Ile Ile Glu Tyr Glu Lys Lys
                165                 170                 175
Gln Thr Leu Gly Gln Asn Asp Thr Gly Phe Ser Cys Asp Gly Thr Ala
            180                 185                 190
Asn Thr Phe Arg Val Met Phe Lys Glu Pro Ile Glu Ile Leu Pro Asn
        195                 200                 205
Val Cys Tyr Thr Ala Cys Ala Thr Leu Lys Gly Pro Asp Ser His Tyr
```

```
    210                 215                 220
Gly Thr Lys Gly Leu Lys Lys Val Val His Glu Thr Pro Ala Ala Ser
225                 230                 235                 240
Lys Thr Val Phe Phe Phe Phe Ser Ser Pro Gly Asn Asn Asn Gly Thr
                245                 250                 255
Ser Ile Glu Asp Gly Gln Ile Pro Glu Ile Ile Phe Tyr Thr
            260                 265                 270
```

<210> 1226
<211> 273
<212>Amino acid
<213> Homo sapiens

<400> 1226

```
Ser Val Trp Trp Asn Ser Glu Val Lys Asp Trp Met Gln Lys Lys Arg
  1               5                  10                  15
Arg Gly Leu Arg Asn Ser Arg Ala Thr Ala Gly Asp Ile Ala His Tyr
            20                  25                  30
Tyr Arg Asp Tyr Val Val Lys Lys Gly Leu Gly His Asn Phe Val Ser
        35                  40                  45
Gly Ala Val Val Thr Ala Val Glu Trp Gly Thr Pro Asp Pro Ser Ser
    50                  55                  60
Cys Gly Ala Gln Asp Ser Ser Pro Leu Phe Gln Val Ser Gly Phe Leu
65                  70                  75                  80
Thr Arg Asn Gln Ala Gln Gln Pro Phe Ser Leu Trp Ala Arg Asn Val
                85                  90                  95
Val Leu Ala Thr Gly Thr Phe Asp Ser Pro Ala Arg Leu Gly Ile Pro
            100                 105                 110
Gly Glu Ala Leu Pro Phe Ile His His Glu Leu Ser Ala Leu Glu Ala
        115                 120                 125
Ala Thr Arg Val Gly Ala Val Thr Pro Ala Ser Asp Pro Val Leu Ile
    130                 135                 140
Ile Gly Ala Gly Leu Ser Ala Ala Asp Ala Val Leu Tyr Ala Arg His
145                 150                 155                 160
Tyr Asn Ile Pro Val Ile His Ala Phe Arg Arg Ala Val Asp Asp Pro
                165                 170                 175
Gly Leu Val Phe Asn Gln Leu Pro Lys Met Leu Tyr Pro Glu Tyr His
            180                 185                 190
Lys Val His Gln Met Met Arg Glu Gln Ser Ile Leu Ser Pro Ser Pro
        195                 200                 205
Tyr Glu Gly Tyr Arg Ser Leu Pro Arg His Gln Leu Leu Cys Phe Lys
    210                 215                 220
Glu Asp Cys Gln Ala Val Phe Gln Asp Leu Glu Gly Val Glu Lys Val
225                 230                 235                 240
Phe Gly Val Ser Leu Val Leu Val Leu Ile Gly Ser His Pro Asp Leu
                245                 250                 255
Ser Phe Leu Pro Gly Ala Gly Leu Thr Leu Gln Trp Ile Leu Thr Ser
            260                 265                 270
Arg
273
```

<210> 1227
<211> 86
<212>Amino acid
<213> Homo sapiens

<400> 1227

```
Lys Leu Arg Pro Phe Ile Phe Ser Asn Gln Ser Leu Trp Leu His Ser
 1               5                  10                  15
Tyr Glu Gly Ala Glu Leu Glu Lys Thr Phe Ile Lys Gly Ser Trp Ala
            20                  25                  30
Thr Phe Trp Val Lys Val Ala Ser Cys Trp Ala Cys Val Leu Leu Tyr
        35                  40                  45
Leu Gly Leu Leu Leu Ala Pro Leu Cys Trp Pro Pro Thr Gln Lys Pro
    50                  55                  60
Gln Pro Leu Ile Leu Arg Arg Arg Arg His Arg Ile Ile Ser Pro Asp
65                  70                  75                  80
Asn Lys Tyr Pro Pro Val
                85  86
```

<210> 1228
<211> 249
<212>Amino acid
<213> Homo sapiens

<400> 1228

```
Gln Leu Ile His Leu Ser His Gly Tyr Gln Ile His Trp Thr Asp Tyr
 1               5                  10                  15
Tyr Asn Val Gly Thr Gly Arg Pro Glu Phe Gly Thr Arg Ala Ala His
            20                  25                  30
Lys Ser Leu Ala Gly Ala Glu Leu Lys Thr Leu Lys Asp Phe Val Thr
        35                  40                  45
Val Leu Ala Lys Leu Phe Pro Gly Arg Pro Pro Val Lys Lys Leu Leu
    50                  55                  60
Glu Met Leu Gln Glu Trp Leu Ala Ser Leu Pro Leu Asp Arg Ile Pro
65                  70                  75                  80
Tyr Asn Ala Val Leu Asp Leu Val Asn Asn Lys Met Arg Ile Ser Gly
                85                  90                  95
Ile Phe Leu Thr Asn His Ile Lys Trp Val Gly Cys Gln Gly Ser Arg
            100                 105                 110
Ser Glu Leu Arg Gly Tyr Pro Cys Ser Leu Trp Lys Leu Phe His Thr
        115                 120                 125
Leu Thr Val Glu Ala Ser Thr His Pro Asp Ala Leu Val Gly Thr Gly
    130                 135                 140
Phe Glu Asp Asp Pro Gln Ala Val Leu Gln Thr Met Arg Arg Tyr Val
145                 150                 155                 160
His Thr Phe Phe Gly Cys Lys Glu Cys Gly Glu His Phe Glu Glu Met
                165                 170                 175
Ala Lys Glu Ser Met Asp Ser Val Lys Thr Pro Asp Gln Ala Ile Leu
            180                 185                 190
Trp Leu Trp Lys Lys His Asn Met Val Asn Gly Arg Leu Ala Gly Glu
        195                 200                 205
Lys Pro Leu Gly Met Gly Gly Ser Ala Arg Ala Glu Gly Gly Pro Gly
    210                 215                 220
Pro Gly Thr Ala Arg Thr Ala Arg Leu Pro Trp Gly Leu Ser Leu Ser
225                 230                 235                 240
Phe Ala Ala Ser Cys His Pro Leu Cys
                245                 249
```

<210> 1229
<211> 800
<212>Amino acid

<213> Homo sapiens

<400> 1229

```
His Gly Gly Ala Thr Phe Ile Asn Ala Phe Val Thr Thr Pro Met Cys
 1               5                  10                  15
Cys Pro Ser Arg Ser Ser Met Leu Thr Gly Lys Tyr Val His Asn His
            20                  25                  30
Asn Val Tyr Thr Asn Asn Glu Asn Cys Ser Ser Pro Ser Trp Gln Ala
        35                  40                  45
Met His Glu Pro Arg Thr Phe Ala Val Tyr Leu Asn Asn Thr Gly Tyr
    50                  55                  60
Arg Thr Ala Phe Phe Gly Lys Tyr Leu Asn Glu Tyr Asn Gly Ser Tyr
65                  70                  75                  80
Ile Pro Pro Gly Trp Arg Glu Trp Leu Gly Leu Ile Lys Asn Ser Arg
                85                  90                  95
Phe Tyr Asn Tyr Thr Val Cys Arg Asn Gly Ile Lys Glu Lys His Gly
            100                 105                 110
Phe Asp Tyr Ala Lys Asp Tyr Phe Thr Asp Leu Ile Thr Asn Glu Ser
        115                 120                 125
Ile Asn Tyr Phe Lys Met Ser Lys Arg Met Tyr Pro His Arg Pro Val
    130                 135                 140
Met Met Val Ile Ser His Ala Glu Pro His Gly Pro Glu Asp Ser Ala
145                 150                 155                 160
Pro Gln Phe Ser Lys Leu Tyr Pro Asn Ala Ser Gln His Ile Thr Pro
                165                 170                 175
Ser Tyr Asn Tyr Ala Pro Asn Met Asp Lys His Trp Ile Met Gln Tyr
            180                 185                 190
Thr Gly Pro Met Leu Pro Ile His Met Glu Phe Thr Asn Ile Leu Gln
        195                 200                 205
Arg Lys Arg Leu Gln Thr Leu Met Ser Val Asp Asp Ser Val Glu Arg
    210                 215                 220
Leu Tyr Asn Met Leu Val Glu Thr Gly Glu Leu Glu Asn Thr Tyr Ile
225                 230                 235                 240
Ile Tyr Thr Ala Asp His Gly Tyr His Ile Gly Gln Phe Gly Leu Val
                245                 250                 255
Lys Gly Lys Ser Met Pro Tyr Asp Phe Asp Ile Arg Val Pro Phe Phe
            260                 265                 270
Ile Arg Gly Pro Ser Val Glu Pro Gly Ser Ile Val Pro Gln Ile Val
        275                 280                 285
Leu Asn Ile Asp Leu Ala Pro Thr Ile Leu Asp Ile Ala Gly Leu Asp
    290                 295                 300
Thr Pro Pro Asp Val Asp Gly Lys Ser Val Leu Lys Leu Leu Asp Pro
305                 310                 315                 320
Glu Lys Pro Gly Asn Arg Phe Arg Thr Asn Lys Lys Ala Lys Ile Trp
                325                 330                 335
Arg Asp Thr Phe Leu Val Glu Arg Gly Lys Phe Leu Arg Lys Lys Glu
            340                 345                 350
Glu Ser Ser Lys Asn Ile Gln Gln Ser Asn His Leu Pro Lys Tyr Glu
        355                 360                 365
Arg Val Lys Glu Leu Cys Gln Gln Ala Arg Tyr Gln Thr Ala Cys Glu
    370                 375                 380
Gln Pro Gly Gln Lys Trp Gln Cys Ile Glu Asp Thr Ser Gly Lys Leu
385                 390                 395                 400
Arg Ile His Lys Cys Lys Gly Pro Ser Asp Leu Leu Thr Val Arg Gln
                405                 410                 415
Ser Thr Arg Asn Leu Tyr Ala Arg Gly Phe His Asp Lys Asp Lys Glu
            420                 425                 430
Cys Ser Cys Arg Glu Ser Gly Tyr Arg Ala Ser Arg Ser Gln Arg Lys
        435                 440                 445
Ser Gln Arg Gln Phe Leu Arg Asn Gln Gly Thr Pro Lys Tyr Lys Pro
```

```
    450                 455                 460
Arg Phe Val His Thr Arg Gln Thr Arg Ser Leu Ser Val Glu Phe Glu
465                 470                 475                 480
Gly Glu Ile Tyr Asp Ile Asn Leu Glu Glu Glu Glu Glu Leu Gln Val
                485                 490                 495
Leu Gln Pro Arg Asn Ile Ala Lys Arg His Asp Glu Gly His Lys Gly
            500                 505                 510
Pro Arg Asp Leu Gln Ala Ser Ser Gly Gly Asn Arg Gly Arg Met Leu
        515                 520                 525
Ala Asp Ser Ser Asn Ala Val Gly Pro Pro Thr Thr Val Arg Val Thr
    530                 535                 540
His Lys Cys Phe Ile Leu Pro Asn Asp Ser Ile His Cys Glu Arg Glu
545                 550                 555                 560
Leu Tyr Gln Ser Ala Arg Ala Trp Lys Asp His Lys Ala Tyr Ile Asp
                565                 570                 575
Glu Glu Ile Glu Ala Leu Gln Asp Lys Ile Lys Asn Leu Arg Glu Val
            580                 585                 590
Arg Gly His Leu Lys Arg Arg Lys Pro Glu Glu Cys Ser Cys Ser Lys
        595                 600                 605
Gln Ser Tyr Tyr Asn Lys Glu Lys Gly Val Lys Lys Gln Glu Lys Leu
    610                 615                 620
Lys Ser His Leu His Pro Phe Lys Glu Ala Ala Gln Glu Val Asp Ser
625                 630                 635                 640
Lys Leu Gln Leu Phe Lys Glu Asn Asn Arg Arg Arg Lys Lys Glu Arg
                645                 650                 655
Lys Glu Lys Arg Arg Gln Arg Lys Gly Glu Glu Cys Ser Leu Pro Gly
            660                 665                 670
Leu Thr Cys Phe Thr His Asp Asn Asn His Trp Gln Thr Ala Pro Phe
        675                 680                 685
Trp Asn Leu Gly Ser Phe Cys Ala Cys Thr Ser Ser Asn Asn Asn Thr
    690                 695                 700
Tyr Trp Cys Leu Arg Thr Val Asn Glu Thr His Asn Phe Leu Phe Cys
705                 710                 715                 720
Glu Phe Ala Thr Gly Phe Leu Glu Tyr Phe Asp Met Asn Thr Asp Pro
                725                 730                 735
Tyr Gln Leu Thr Asn Thr Val His Thr Val Glu Arg Gly Ile Leu Asn
            740                 745                 750
Gln Leu His Val Gln Leu Met Glu Leu Arg Ser Cys Gln Gly Tyr Lys
        755                 760                 765
Gln Cys Asn Pro Arg Pro Lys Asn Leu Asp Val Gly Asn Lys Asp Gly
    770                 775                 780
Gly Ser Tyr Asp Leu His Arg Gly Gln Leu Trp Asp Gly Trp Glu Gly
785                 790                 795                 800
```

<210> 1230
<211> 698
<212>Amino acid
<213> Homo sapiens

<400> 1230

```
His Leu Leu Ile Ala Gln Glu Leu Ala Asp Arg Val Gly Glu Gly Arg
  1               5                  10                  15
Ala Cys Trp Ser Leu Gly Asn Ala Tyr Val Ser Met Gly Arg Pro Ala
            20                  25                  30
Gln Ala Leu Thr Phe Ala Lys Lys His Leu Gln Ile Ser Gln Glu Ile
        35                  40                  45
Gly Asp Arg His Gly Glu Leu Thr Ala Arg Met Asn Val Ala Gln Leu
```

```
     50                  55                  60
Gln Leu Val Leu Gly Arg Leu Thr Ser Pro Ala Ala Ser Glu Lys Pro
 65                  70                  75                  80
Asp Leu Ala Gly Tyr Glu Ala Gln Gly Ala Arg Pro Lys Arg Thr Gln
                85                  90                  95
Arg Leu Ser Ala Glu Thr Trp Asp Leu Leu Arg Leu Pro Leu Glu Arg
            100                 105                 110
Glu Gln Asn Gly Asp Ser His His Ser Gly Asp Trp Arg Gly Pro Ser
        115                 120                 125
Arg Asp Ser Leu Pro Leu Pro Val Arg Ser Arg Lys Tyr Gln Glu Gly
    130                 135                 140
Pro Asp Ala Glu Arg Arg Pro Arg Glu Gly Ser His Ser Pro Leu Asp
145                 150                 155                 160
Ser Ala Asp Val Arg Val His Val Pro Arg Thr Ser Ile Pro Arg Ala
                165                 170                 175
Pro Ser Ser Asp Glu Glu Cys Phe Phe Asp Leu Leu Thr Lys Phe Gln
            180                 185                 190
Ser Ser Arg Met Asp Asp Gln Arg Cys Pro Leu Asp Asp Gly Gln Ala
        195                 200                 205
Gly Ala Ala Glu Ala Thr Ala Ala Pro Thr Leu Glu Asp Arg Ile Ala
    210                 215                 220
Gln Pro Ser Met Thr Ala Ser Pro Gln Thr Glu Glu Phe Phe Asp Leu
225                 230                 235                 240
Ile Ala Ser Ser Gln Ser Arg Arg Leu Asp Asp Gln Arg Ala Ser Val
                245                 250                 255
Gly Ser Leu Pro Gly Leu Arg Ile Thr His Ser Asn Ala Gly His Leu
            260                 265                 270
Arg Gly His Gly Glu Pro Gln Glu Pro Gly Asp Asp Phe Phe Asn Met
        275                 280                 285
Leu Ile Lys Tyr Gln Ser Ser Arg Ile Asp Asp Gln Arg Cys Pro Pro
    290                 295                 300
Pro Asp Val Leu Pro Arg Gly Pro Thr Met Pro Asp Glu Asp Phe Phe
305                 310                 315                 320
Ser Leu Ile Gln Arg Val Gln Ala Lys Arg Met Asp Glu Gln Arg Val
                325                 330                 335
Asp Leu Ala Gly Gly Pro Gly Ala Gly Gly Arg Arg Pro Ala Arg Ala
            340                 345                 350
Pro Ala Ala Val Pro Ala Trp Cys Glu Leu Arg Pro Cys Ala His Arg
        355                 360                 365
Gln Ala His Pro Ala Pro Thr Pro Gly Arg Arg Ser His Ser His Ser
    370                 375                 380
His Val Leu Pro Arg Pro Leu Pro Arg Thr Gly Thr Gly His Ala Ala
385                 390                 395                 400
Pro Arg Pro Pro Arg Pro Arg Ala Thr Gly Ser Gly Gln Ala Ala Arg
                405                 410                 415
Gly Gly Arg Ala Cys Phe His Pro Gly Leu Ala Pro Met Ala Leu Ser
            420                 425                 430
Phe Leu Pro Ser Ala Pro Ala Ala Gly Arg Thr Gly Pro Ser Ala Cys
        435                 440                 445
Arg Pro Arg Pro Gly Ala Val Arg Leu Pro His Pro Leu Pro Gln Ala
    450                 455                 460
Leu Pro Val Leu Pro Cys Pro Ala Lys Cys Glu Thr Leu Leu Ser Pro
465                 470                 475                 480
Ser Pro Ser Pro Lys Val Ser Leu Ser Arg Leu Leu Gly Pro Pro Arg
                485                 490                 495
Thr Gly Pro Cys Ser Val Pro Pro Glu Leu Val Leu Gly Trp Pro Cys
            500                 505                 510
Asp Arg His Ala Pro Pro Leu Gln Leu Arg Pro Gly Ala Gly Leu Pro
        515                 520                 525
Pro Ser Leu Ser Pro His Ser Pro Ala Arg Gly Gln Gln Pro Gln Lys
    530                 535                 540
Ala Pro Gln Thr Thr His Gly Arg Pro Gly Cys Ser Gly Ser Pro Glu
545                 550                 555                 560
Val Pro Pro Ala Glu Ser Gln Gly Pro Ala Gly Ala Ser Thr Gly Ala
```

```
                565                 570                 575
Gly Pro Ile Ser Lys Ala Glu Gly Met Ala Gly His Glu Leu Arg His
            580                 585                 590
Ser Lys Thr Pro Ser Gln Glu Lys Gly Gln Gly Leu Val Leu Gly Met
        595                 600                 605
Leu Thr Gly Ser Lys Ser Ser Ala Gln Ser Gly Trp Glu Val Ala Pro
    610                 615                 620
Gly Ser Val Thr Leu Thr Gln Val Gly Gly Trp Ser Val Glu Ala Gly
625                 630                 635                 640
Glu Ala Ser Leu Ser Ser Thr Leu Gln Thr Pro His Met Arg Thr Pro
                645                 650                 655
Leu Leu Pro Pro Ala Gly Gly Asp Asp Ile Thr Ala Leu Ser Met Gly
            660                 665                 670
Arg Gly Leu Thr Gly His Gln Val Arg Asp Pro Arg Thr Gly Arg Thr
        675                 680                 685
Cys Trp Ser Leu Arg Trp Ala Pro Gly Ala
    690                 695         698
```

<210> 1231
<211> 131
<212>Amino acid
<213> Homo sapiens

<400> 1231

```
Asn Ser Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro
  1               5                  10                  15
Val Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro
            20                  25                  30
Ile Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His
        35                  40                  45
Glu Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val
    50                  55                  60
Gly Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn
65                  70                  75                  80
Leu Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro
                85                  90                  95
Gln His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp
            100                 105                 110
Ser Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr Arg Leu Ala Lys
        115                 120                 125
Asp Gly Leu
    130 131
```

<210> 1232
<211> 71
<212>Amino acid
<213> Homo sapiens

<400> 1232

```
Gln Glu Ser Gly Phe Ser Cys Lys Gly Pro Gly Gln Asn Val Ala Val
  1               5                  10                  15
Thr Arg Ala His Pro Asp Ser Gln Gly Arg Arg Arg Arg Pro Glu Arg
            20                  25                  30
Gly Ala Arg Gly Gly Gln Val Phe Tyr Asn Ser Glu Tyr Gly Glu Leu
```

```
         35                  40                  45
Ser Glu Pro Ser Glu Glu Asp His Cys Ser Pro Ser Ala Arg Val Thr
     50                  55                  60
Phe Phe Thr Asp Asn Ser Tyr
 65                  70  71
```

<210> 1233
<211> 146
<212>Amino acid
<213> Homo sapiens

<400> 1233

```
Val Ile Val His Ala Arg Pro Ile Arg Thr Arg Ala Ser Lys Tyr Tyr
  1               5                  10                  15
Ile Pro Glu Ala Val Tyr Gly Leu Pro Ala Tyr Pro Ala Tyr Ala Gly
            20                  25                  30
Gly Gly Gly Phe Val Leu Ser Gly Ala Thr Leu His Arg Leu Ala Gly
         35                  40                  45
Ala Cys Ala Gln Val Glu Leu Phe Pro Ile Asp Asp Val Phe Leu Gly
     50                  55                  60
Met Cys Leu Gln Arg Leu Arg Leu Thr Pro Glu Pro His Pro Ala Phe
 65                  70                  75                  80
Arg Thr Phe Gly Ile Pro Gln Pro Ser Ala Ala Pro His Leu Ser Thr
             85                  90                  95
Phe Asp Pro Cys Phe Tyr Arg Glu Leu Val Val Val His Gly Leu Ser
        100                 105                 110
Ala Ala Asp Ile Trp Leu Met Trp Arg Leu Leu His Gly Pro His Gly
    115                 120                 125
Pro Ala Cys Ala His Pro Gln Pro Val Ala Ala Gly Pro Phe Gln Trp
130                 135                 140
Asp Ser
145 146
```

<210> 1234
<211> 299
<212>Amino acid
<213> Homo sapiens

<400> 1234

```
Met Ala Ser Ala Ala Cys Ser Met Asp Pro Ile Asp Ser Phe Glu Leu
  1               5                  10                  15
Leu Asp Leu Leu Phe Asp Arg Gln Asp Gly Ile Leu Arg His Val Glu
            20                  25                  30
Leu Gly Glu Gly Trp Gly His Val Lys Asp Gln Val Leu Pro Asn Pro
         35                  40                  45
Asp Ser Asp Asp Phe Leu Ser Ser Ile Leu Gly Ser Gly Asp Ser Leu
     50                  55                  60
Pro Ser Ser Pro Leu Trp Ser Pro Glu Gly Ser Asp Ser Gly Ile Ser
 65                  70                  75                  80
Glu Asp Leu Pro Ser Asp Pro Gln Asp Thr Pro Pro Arg Ser Gly Pro
             85                  90                  95
Ala Thr Ser Pro Ala Gly Cys His Pro Ala Gln Pro Gly Lys Gly Pro
        100                 105                 110
Cys Leu Ser Tyr His Pro Gly Asn Ser Cys Ser Thr Thr Thr Pro Gly
```

```
        115                 120                 125
Pro Val Ile Gln Gln Gln His His Leu Gly Ala Ser Tyr Leu Leu Arg
    130                 135                 140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145                 150                 155                 160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
                165                 170                 175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
            180                 185                 190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
        195                 200                 205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
    210                 215                 220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225                 230                 235                 240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
                245                 250                 255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
            260                 265                 270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
        275                 280                 285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
    290                 295             299
```

<210> 1235
<211> 1098
<212>Amino acid
<213> Homo sapiens

```
    <400> 1235
Ala Arg Gly Arg Arg Ser Arg Pro Val Trp Ala Ala Ser Trp Gly Gly
  1               5                  10                  15
Arg Gly Arg Pro Ala Ala Arg Arg Arg Pro Arg Gly Leu Ala Ala Thr
            20                  25                  30
Met Gly Phe Glu Leu Asp Arg Phe Asp Gly Asp Val Asp Pro Asp Leu
        35                  40                  45
Lys Cys Ala Leu Cys His Lys Val Leu Glu Asp Pro Leu Thr Thr Pro
    50                  55                  60
Cys Gly His Val Phe Cys Ala Gly Cys Val Leu Pro Trp Val Val Gln
65                  70                  75                  80
Glu Gly Ser Cys Pro Ala Arg Cys Arg Gly Arg Leu Ser Ala Lys Glu
                85                  90                  95
Leu Asn His Val Leu Pro Leu Lys Arg Leu Ile Leu Lys Leu Asp Ile
            100                 105                 110
Lys Cys Ala Tyr Ala Thr Arg Gly Cys Gly Arg Val Val Lys Leu Gln
        115                 120                 125
Gln Leu Pro Glu His Leu Glu Arg Cys Asp Phe Ala Pro Ala Arg Cys
    130                 135                 140
Arg His Ala Gly Cys Gly Gln Val Leu Leu Arg Arg Asp Val Glu Ala
145                 150                 155                 160
His Met Arg Asp Ala Cys Asp Ala Arg Pro Val Gly Arg Cys Gln Glu
                165                 170                 175
Gly Cys Gly Leu Pro Leu Thr His Gly Glu Gln Arg Ala Gly Gly His
            180                 185                 190
Cys Cys Ala Arg Ala Leu Arg Ala His Asn Gly Ala Leu Gln Ala Arg
        195                 200                 205
Leu Gly Ala Leu His Lys Ala Leu Lys Lys Glu Ala Leu Arg Ala Gly
    210                 215                 220
Lys Arg Glu Lys Ser Leu Val Ala Gln Leu Ala Ala Ala Gln Leu Glu
```

```
225                 230                 235                 240
Leu Gln Met Thr Ala Leu Arg Tyr Gln Lys Lys Phe Thr Glu Tyr Ser
                245                 250                 255
Ala Arg Leu Asp Ser Leu Ser Arg Cys Val Ala Ala Pro Pro Gly Gly
            260                 265                 270
Lys Gly Glu Glu Thr Lys Ser Leu Thr Leu Val Leu His Arg Asp Ser
        275                 280                 285
Gly Ser Leu Gly Phe Asn Ile Ile Gly Gly Arg Pro Ser Val Asp Asn
    290                 295                 300
His Asp Gly Ser Ser Ser Glu Gly Ile Phe Val Ser Lys Ile Val Asp
305                 310                 315                 320
Ser Gly Pro Ala Ala Lys Glu Gly Gly Leu Gln Ile His Asp Arg Ile
                325                 330                 335
Ile Glu Val Asn Gly Arg Asp Leu Ser Arg Ala Thr His Asp Gln Ala
            340                 345                 350
Val Glu Ala Phe Lys Thr Ala Lys Glu Pro Ile Val Val Gln Val Leu
        355                 360                 365
Arg Arg Thr Pro Arg Thr Lys Met Phe Thr Pro Pro Ser Glu Ser Gln
    370                 375                 380
Leu Val Asp Thr Gly Thr Gln Thr Asp Ile Thr Phe Glu His Ile Met
385                 390                 395                 400
Ala Leu Thr Lys Met Ser Ser Pro Ser Pro Pro Val Leu Asp Pro Tyr
                405                 410                 415
Leu Leu Pro Glu Glu His Pro Ser Ala His Glu Tyr Tyr Asp Pro Asn
            420                 425                 430
Asp Tyr Ile Gly Asp Ile His Gln Glu Met Asp Arg Glu Glu Leu Glu
        435                 440                 445
Leu Glu Glu Val Asp Leu Tyr Arg Met Asn Ser Gln Asp Lys Leu Gly
    450                 455                 460
Leu Thr Val Cys Tyr Arg Thr Asp Asp Glu Asp Asp Ile Gly Ile Tyr
465                 470                 475                 480
Ile Ser Glu Ile Asp Pro Asn Ser Ile Ala Ala Lys Asp Gly Arg Ile
                485                 490                 495
Arg Glu Gly Asp Arg Ile Ile Gln Ile Asn Gly Ile Glu Val Gln Asn
            500                 505                 510
Arg Glu Glu Ala Val Ala Leu Leu Thr Ser Glu Glu Asn Lys Asn Phe
        515                 520                 525
Ser Leu Leu Ile Ala Arg Ala Glu Leu Gln Leu Asp Glu Gly Trp Met
    530                 535                 540
Asp Asp Asp Arg Asn Asp Phe Leu Asp Asp Leu His Met Asp Met Leu
545                 550                 555                 560
Glu Glu Gln His His Gln Ala Met Gln Phe Thr Ala Ser Val Leu Gln
                565                 570                 575
Gln Lys Lys His Asp Glu Asp Gly Gly Thr Thr Asp Thr Ala Thr Ile
            580                 585                 590
Leu Ser Asn Gln His Glu Lys Asp Ser Gly Val Gly Arg Thr Asp Glu
        595                 600                 605
Ser Thr Arg Asn Asp Glu Ser Ser Glu Gln Glu Asn Asn Gly Asp Asp
    610                 615                 620
Ala Thr Ala Ser Ser Asn Pro Leu Ala Gly Gln Arg Lys Leu Thr Cys
625                 630                 635                 640
Ser Gln Asp Thr Leu Gly Ser Gly Asp Leu Pro Phe Ser Asn Lys Ser
                645                 650                 655
Phe Ile Ser Pro Glu Cys Thr Gly Ala Ala Tyr Leu Gly Ile Pro Val
            660                 665                 670
Asp Glu Cys Glu Arg Phe Arg Glu Leu Leu Glu Leu Lys Cys Gln Val
        675                 680                 685
Lys Ser Ala Thr Pro Tyr Gly Leu Tyr Tyr Pro Ser Gly Pro Leu Asp
    690                 695                 700
Ala Gly Lys Ser Asp Pro Glu Ser Val Asp Lys Glu Leu Glu Leu Leu
705                 710                 715                 720
Asn Glu Glu Leu Arg Ser Ile Glu Leu Glu Cys Leu Ser Ile Val Arg
                725                 730                 735
Ala His Lys Met Gln Gln Leu Lys Glu Gln Tyr Arg Glu Ser Trp Met
```

```
            740                 745                 750
Leu His Asn Ser Gly Phe Arg Asn Tyr Asn Thr Ser Ile Asp Val Arg
        755                 760                 765
Arg His Glu Leu Ser Asp Ile Thr Glu Leu Pro Glu Lys Ser Asp Lys
    770                 775                 780
Asp Ser Ser Ser Ala Tyr Asn Thr Gly Glu Ser Cys Arg Ser Thr Pro
785                 790                 795                 800
Leu Thr Leu Glu Ile Ser Pro Asp Asn Ser Leu Arg Arg Ala Ala Glu
                805                 810                 815
Gly Ile Ser Cys Pro Ser Ser Glu Gly Ala Val Gly Thr Thr Glu Ala
            820                 825                 830
Tyr Gly Pro Ala Ser Lys Asn Leu Leu Ser Ile Thr Glu Asp Pro Glu
        835                 840                 845
Val Gly Thr Pro Thr Tyr Ser Pro Ser Leu Lys Glu Leu Asp Pro Asn
    850                 855                 860
Gln Pro Leu Glu Ser Lys Glu Arg Arg Ala Ser Asp Gly Ser Arg Ser
865                 870                 875                 880
Pro Thr Pro Ser Gln Lys Leu Gly Ser Ala Tyr Leu Pro Ser Tyr His
                885                 890                 895
His Ser Pro Tyr Lys His Ala His Ile Pro Ala His Ala Gln His Tyr
            900                 905                 910
Gln Ser Tyr Met Gln Leu Ile Gln Gln Lys Ser Ala Val Glu Tyr Ala
        915                 920                 925
Gln Ser Gln Met Ser Leu Val Ser Met Cys Lys Asp Leu Ser Ser Pro
    930                 935                 940
Thr Pro Ser Glu Pro Arg Met Glu Trp Lys Val Lys Ile Arg Ser Asp
945                 950                 955                 960
Gly Thr Arg Tyr Ile Thr Lys Arg Pro Val Arg Asp Arg Leu Leu Arg
                965                 970                 975
Glu Arg Ala Leu Lys Ile Arg Glu Glu Arg Ser Gly Met Thr Thr Asp
            980                 985                 990
Asp Asp Ala Val Ser Glu Met Lys Met Gly Arg Tyr Trp Ser Lys Glu
        995                1000                1005
Glu Arg Lys Gln His Leu Val Lys Ala Lys Glu Gln Arg Arg Arg Arg
   1010                1015                1020
Glu Phe Met Met Gln Ser Arg Leu Asp Cys Leu Lys Glu Gln Gln Ala
1025                1030                1035                1040
Ala Asp Asp Arg Lys Glu Met Asn Ile Leu Glu Leu Ser His Lys Lys
                1045                1050                1055
Met Met Lys Lys Arg Asn Lys Lys Ile Phe Asp Asn Trp Met Thr Ile
            1060                1065                1070
Gln Glu Leu Leu Thr His Gly Thr Lys Ser Pro Asp Gly Thr Arg Val
        1075                1080                1085
Tyr Asn Ser Phe Leu Ser Val Thr Thr Val
   1090                1095        1098
```

<210> 1236
<211> 51
<212>Amino acid
<213> Homo sapiens

<400> 1236

```
Phe Phe Phe Leu Val Glu Met Gly Phe Cys His Val Gly Gln Gly Gly
  1               5                  10                  15
Leu Thr Leu Ile Gly Ser Ser Asn Leu Pro Ala Ser Ala Ser Lys Ser
            20                  25                  30
Ala Gly Ile Thr Gly Val Ser His Cys Ala Arg Pro Asp Phe Lys Ser
        35                  40                  45
Cys Val Glu
```

50 51

<210> 1237
<211> 70
<212>Amino acid
<213> Homo sapiens

<400> 1237
Leu Ala Gly Arg Lys Val Leu Leu Phe Val Ser Gly Tyr Val Val Gly
1 5 10 15
Trp Gly Pro Ile Thr Trp Leu Leu Met Ser Glu Val Leu Pro Leu Arg
20 25 30
Ala Arg Gly Val Ala Ser Gly Leu Cys Val Leu Ala Ser Trp Leu Thr
35 40 45
Ala Phe Val Leu Thr Lys Ser Phe Leu Pro Gly Gly Val Ser Val Gln
50 55 60
Pro Gln Ala Pro Gly Pro
65 70

<210> 1238
<211> 114
<212>Amino acid
<213> Homo sapiens

<400> 1238
Phe Trp Ala Pro Gly Pro Pro Gly Val Gly Ala Ala Val Gly Asp Ala
1 5 10 15
Ser Thr Arg Ser Leu Arg Glu Ser Cys Pro Ser Pro Ser Pro Gly Arg
20 25 30
Leu Arg Arg Thr Thr Ala Pro Trp Ser Ser Gln Ala Arg Ala Ala Ala
35 40 45
Pro Ala Pro Ser Ser Ser Cys Arg Gly Pro Asp Gly Ala Ser Ser Pro
50 55 60
Arg Asp Leu Pro Trp Arg Pro Trp Lys Ile Leu Arg Arg Thr Pro Leu
65 70 75 80
Ser Gly Asp Val Glu Leu Ser Gln Val His Pro Asp Gln Arg Ile Leu
85 90 95
Arg Arg Phe Ile Leu Ser Arg Thr Cys Gly Asn Thr Ile Pro Gly Met
100 105 110
Ala Glu
114

<210> 1239
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1239
Met Arg Arg Phe Leu Ser Lys Val Tyr Ser Phe Pro Met Arg Lys Leu

```
  1               5                  10                  15
Ile Leu Phe Leu Val Phe Pro Val Val Arg Gln Thr Pro Thr Gln His
             20                  25                  30
Phe Lys Asn Gln Phe Pro Ala Leu His Trp Glu His Glu Leu Gly Leu
         35                  40                  45
Ala Phe Thr Lys Asn Arg Met Asn Tyr Thr Asn Lys Phe Leu Leu Ile
     50                  55                  60
Pro Glu Ser Gly Asp Tyr Phe Ile Tyr Ser Gln Val Thr Phe Arg Gly
 65                  70                  75                  80
Met Thr Ser Glu Cys Ser Glu Ile Arg Gln Ala Gly Arg Pro Asn Lys
                 85                  90                  95
Pro Asp Ser Ile Thr Val Val Ile Thr Lys Val Thr Asp Ser Tyr Pro
            100                 105                 110
Glu Pro Thr Gln Leu Leu Met Gly Thr Lys Ser Val Cys Glu Val Gly
        115                 120                 125
Ser Asn Trp Phe Gln Pro Ile Tyr Leu Gly Ala Met Phe Ser Leu Gln
    130                 135                 140
Glu Gly Asp Lys Leu Met Val Asn Val Ser Asp Ile Ser Leu Val Asp
145                 150                 155                 160
Tyr Thr Lys Glu Asp Lys Thr Phe Phe Gly Ala Phe Leu Leu
                165                 170                 174
```

<210> 1240
<211> 425
<212>Amino acid
<213> Homo sapiens

<400> 1240

```
Phe Val Trp Asp Glu Val Ala Gln Arg Ser Gly Cys Glu Glu Arg Trp
  1               5                  10                  15
Leu Val Ile Asp Arg Lys Val Tyr Asn Ile Ser Glu Phe Thr Arg Arg
             20                  25                  30
His Pro Gly Gly Ser Arg Val Ile Ser His Tyr Ala Gly Gln Asp Ala
         35                  40                  45
Thr Asp Pro Phe Val Ala Phe His Ile Asn Lys Gly Leu Val Lys Lys
     50                  55                  60
Tyr Met Asn Ser Leu Leu Ile Gly Glu Leu Ser Pro Glu Gln Pro Ser
 65                  70                  75                  80
Phe Glu Pro Thr Lys Asn Lys Glu Leu Thr Asp Glu Phe Arg Glu Leu
                 85                  90                  95
Arg Ala Thr Val Glu Arg Met Gly Leu Met Lys Ala Asn His Val Phe
            100                 105                 110
Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly Ala Ala Trp
        115                 120                 125
Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe Leu Leu Cys
    130                 135                 140
Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp Leu Gln His
145                 150                 155                 160
Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp Asn His Leu
                165                 170                 175
Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro Ala Ser Trp
            180                 185                 190
Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn Cys Phe Arg
        195                 200                 205
Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala Leu Gly Lys
    210                 215                 220
Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr Met Pro Tyr
225                 230                 235                 240
Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro Ala Leu Leu
```

```
                245                 250                 255
Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile Gln Arg Lys
            260                 265                 270
Lys Trp Val Asp Leu Ala Trp Met Ile Thr Phe Tyr Val Arg Phe Phe
        275                 280                 285
Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu Gly Leu Phe
    290                 295                 300
Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp Val Thr Gln
305                 310                 315                 320
Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn Met Asp Trp
                325                 330                 335
Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys Ser Ala Phe
            340                 345                 350
Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His Leu
        355                 360                 365
Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala Pro Leu Val
    370                 375                 380
Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser Lys Pro Leu
385                 390                 395                 400
Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu Ser Gly Gln
                405                 410                 415
Leu Trp Leu Asp Ala Tyr Leu His Gln
            420                 425
```

<210> 1241
<211> 152
<212>Amino acid
<213> Homo sapiens

<400> 1241

```
Gln Cys Gly Gly Ile Pro Tyr Asn Thr Thr Gln Phe Leu Met Asn Asp
  1               5                  10                  15
Arg Asp Pro Glu Glu Pro Asn Leu Asp Val Pro His Gly Ile Ser His
            20                  25                  30
Pro Gly Ser Ser Gly Glu Ser Glu Ala Gly Asp Ser Asp Gly Arg Gly
        35                  40                  45
Arg Ala His Gly Glu Phe Gln Arg Lys Asp Phe Ser Glu Thr Tyr Glu
    50                  55                  60
Arg Phe His Thr Glu Ser Leu Gln Gly Arg Ser Lys Gln Glu Leu Val
65                  70                  75                  80
Arg Asp Tyr Leu Glu Leu Glu Lys Arg Leu Ser Gln Ala Glu Glu Glu
                85                  90                  95
Thr Arg Arg Leu Gln Gln Leu Gln Ala Cys Thr Gly Gln Gln Ser Cys
            100                 105                 110
Arg Gln Val Glu Glu Leu Ala Ala Glu Val Gln Arg Leu Arg Thr Glu
        115                 120                 125
Asn Gln Arg Leu Arg Gln Glu Asn Gln Met Trp Asn Arg Glu Gly Cys
    130                 135                 140
Arg Cys Asp Glu Glu Pro Gly Thr
145                 150     152
```

<210> 1242
<211> 191
<212>Amino acid
<213> Homo sapiens

<400> 1242
Ser Pro Glu Arg Ser Ser Leu Ser Val Gly Arg Glu Lys Ala Met Glu
1 5 10 15
Val Pro Pro Pro Ala Pro Arg Ser Phe Leu Cys Arg Ala Leu Cys Leu
20 25 30
Phe Pro Arg Val Phe Ala Ala Glu Ala Val Thr Ala Asp Ser Glu Val
35 40 45
Leu Glu Glu Arg Gln Lys Arg Leu Pro Tyr Val Pro Glu Pro Tyr Tyr
50 55 60
Pro Glu Ser Gly Trp Asp Arg Leu Arg Glu Leu Phe Gly Lys Asp Val
65 70 75 80
Thr Gly Ser Leu Phe Arg Ile Asn Val Gly Leu Arg Gly Leu Val Ala
85 90 95
Gly Gly Ile Ile Gly Ala Leu Leu Gly Thr Pro Val Gly Gly Leu Leu
100 105 110
Met Ala Phe Gln Lys Tyr Ser Gly Glu Thr Val Gln Glu Arg Lys Gln
115 120 125
Lys Asp Arg Lys Ala Leu His Glu Leu Lys Leu Glu Glu Trp Lys Gly
130 135 140
Arg Leu Gln Val Thr Glu His Leu Pro Glu Lys Ile Glu Ser Ser Leu
145 150 155 160
Gln Glu Asp Glu Pro Glu Asn Asp Ala Lys Lys Ile Glu Ala Leu Leu
165 170 175
Asn Leu Pro Arg Asn Pro Ser Val Ile Asp Lys Gln Asp Lys Asp
180 185 190 191

<210> 1243
<211> 381
<212>Amino acid
<213> Homo sapiens

<400> 1243
Arg Ser Leu Gly Leu Ala Val Thr Glu Met Val Pro Trp Val Arg Thr
1 5 10 15
Met Gly Gln Lys Leu Lys Gln Arg Leu Arg Leu Asp Val Gly Arg Glu
20 25 30
Ile Cys Arg Gln Tyr Pro Leu Phe Cys Phe Leu Leu Leu Cys Leu Ser
35 40 45
Ala Ala Ser Leu Leu Leu Asn Arg Tyr Ile His Ile Leu Met Ile Phe
50 55 60
Trp Ser Phe Val Ala Gly Val Val Thr Phe Tyr Cys Ser Leu Gly Pro
65 70 75 80
Asp Ser Leu Leu Pro Asn Ile Phe Phe Thr Ile Lys Tyr Lys Pro Lys
85 90 95
Gln Leu Gly Leu Gln Glu Leu Phe Pro Gln Gly His Ser Cys Ala Val
100 105 110
Cys Gly Lys Val Lys Cys Lys Arg His Arg Pro Ser Leu Leu Leu Glu
115 120 125
Asn Tyr Gln Pro Trp Leu Asp Leu Lys Ile Ser Ser Lys Val Asp Ala
130 135 140
Ser Leu Ser Glu Val Leu Glu Leu Val Leu Glu Asn Phe Val Tyr Pro
145 150 155 160
Trp Tyr Arg Asp Val Thr Asp Asp Glu Ser Phe Val Asp Glu Leu Arg
165 170 175
Ile Thr Leu Arg Phe Phe Ala Ser Val Leu Ile Arg Arg Ile His Lys
180 185 190
Val Asp Ile Pro Ser Ile Ile Thr Lys Lys Leu Leu Lys Ala Ala Met

```
        195                 200                 205
Lys His Ile Glu Val Ile Val Lys Ala Arg Gln Lys Val Lys Asn Thr
    210                 215                 220
Glu Phe Leu Gln Gln Ala Ala Leu Glu Glu Tyr Gly Pro Glu Leu His
225                 230                 235                 240
Val Ala Leu Arg Ser Arg Arg Asp Glu Leu His Tyr Leu Arg Lys Leu
                245                 250                 255
Thr Glu Leu Leu Phe Pro Tyr Ile Leu Pro Pro Lys Ala Thr Asp Cys
            260                 265                 270
Arg Ser Leu Thr Leu Leu Ile Arg Glu Ile Leu Ser Gly Ser Val Phe
        275                 280                 285
Leu Pro Ser Leu Asp Phe Leu Ala Asp Pro Asp Thr Val Asn His Leu
    290                 295                 300
Leu Ile Ile Phe Ile Asp Asp Ser Pro Pro Glu Lys Ala Thr Glu Pro
305                 310                 315                 320
Ala Ser Pro Leu Val Pro Phe Leu Gln Lys Phe Ala Glu Pro Arg Asn
                325                 330                 335
Lys Lys Pro Ser Val Leu Lys Leu Glu Leu Lys Gln Ile Arg Glu Gln
            340                 345                 350
Gln Asp Leu Leu Phe Arg Phe Met Asn Phe Leu Lys Gln Glu Gly Ala
        355                 360                 365
Val His Val Leu His Val Leu Phe Asp Cys Gly Gly Ile
    370                 375                 380 381
```

<210> 1244
<211> 371
<212>Amino acid
<213> Homo sapiens

<400> 1244

```
Gln Ser Leu Ala Glu Val Leu Gln Gln Leu Gly Ala Ser Ser Glu Leu
  1               5                  10                  15
Gln Ala Val Leu Ser Tyr Ile Phe Pro Thr Tyr Gly Val Thr Pro Asn
            20                  25                  30
His Ser Ala Phe Ser Met His Ala Leu Leu Val Asn His Tyr Met Lys
        35                  40                  45
Gly Gly Phe Tyr Pro Arg Gly Val Thr Ser Glu Ile Ala Phe His Thr
    50                  55                  60
Ile Pro Val Ile Gln Arg Ala Gly Gly Ala Val Leu Thr Lys Ala Thr
65                  70                  75                  80
Val Gln Ser Val Leu Leu Asp Ser Ala Gly Lys Ala Cys Gly Val Ser
                85                  90                  95
Val Lys Lys Gly His Glu Leu Val Asn Ile Tyr Cys Pro Ile Val Val
            100                 105                 110
Ser Asn Ala Gly Leu Phe Asn Thr Tyr Glu His Leu Leu Pro Gly Asn
        115                 120                 125
Ala Arg Cys Leu Pro Gly Val Lys Gln Gln Leu Gly Thr Val Arg Pro
    130                 135                 140
Gly Leu Gly Met Thr Ser Val Phe Ile Cys Leu Arg Gly Thr Lys Glu
145                 150                 155                 160
Asp Leu His Leu Pro Ser Thr Asn Tyr Tyr Val Tyr Tyr Asp Thr Asp
                165                 170                 175
Met Asp Gln Ala Met Glu Arg Tyr Val Ser Met Pro Arg Glu Glu Ala
            180                 185                 190
Ala Glu His Ile Pro Leu Leu Phe Phe Ala Phe Pro Ser Ala Lys Asp
        195                 200                 205
Pro Thr Trp Glu Asp Arg Phe Pro Gly Arg Ser Thr Met Ile Met Leu
    210                 215                 220
Ile Pro Thr Ala Tyr Glu Trp Phe Glu Glu Trp Gln Ala Glu Leu Lys
```

```
225                 230                 235                 240
Gly Lys Arg Gly Ser Asp Tyr Glu Thr Phe Lys Asn Ser Phe Val Glu
                245                 250                 255
Ala Ser Met Ser Val Val Leu Lys Leu Phe Pro Gln Leu Glu Gly Lys
            260                 265                 270
Val Glu Ser Val Thr Ala Gly Ser Pro Leu Thr Asn Gln Phe Tyr Leu
        275                 280                 285
Ala Ala Pro Arg Gly Ala Cys Tyr Gly Ala Asp His Asp Leu Gly Arg
    290                 295                 300
Leu His Pro Cys Val Met Ala Ser Leu Arg Ala Gln Ser Pro Ile Pro
305                 310                 315                 320
Asn Leu Tyr Leu Thr Gly Gln Asp Ile Phe Thr Cys Gly Leu Val Gly
                325                 330                 335
Ala Leu Gln Gly Ala Leu Leu Cys Ser Ser Thr Ile Leu Lys Arg Asn
            340                 345                 350
Leu Tyr Ser Asp Leu Lys Asn Leu Asp Ser Arg Ile Arg Ala Gln Lys
        355                 360                 365
Lys Lys Asn
    370 371
```

<210> 1245
<211> 295
<212>Amino acid
<213> Homo sapiens

<400> 1245

```
Arg Pro Gln Glu Thr Arg Val Leu Gln Val Ser Cys Gly Arg Ala His
  1               5                  10                  15
Ser Leu Val Leu Thr Asp Arg Glu Gly Val Phe Ser Met Gly Asn Asn
             20                  25                  30
Ser Tyr Gly Gln Cys Gly Arg Lys Val Val Glu Asn Glu Ile Tyr Ser
         35                  40                  45
Glu Ser His Arg Val His Arg Met Gln Asp Phe Asp Gly Gln Val Val
     50                  55                  60
Gln Val Ala Cys Gly Gln Asp His Ser Leu Phe Leu Thr Asp Lys Gly
 65                  70                  75                  80
Glu Val Tyr Ser Cys Gly Trp Gly Ala Asp Gly Gln Thr Gly Leu Gly
                 85                  90                  95
His Tyr Asn Ile Thr Ser Ser Pro Thr Lys Leu Gly Gly Asp Leu Ala
            100                 105                 110
Gly Val Asn Val Ile Gln Val Ala Thr Tyr Gly Asp Cys Cys Leu Ala
        115                 120                 125
Val Ser Ala Asp Gly Gly Leu Phe Gly Trp Gly Asn Ser Glu Tyr Leu
    130                 135                 140
Gln Leu Ala Ser Val Thr Asp Ser Thr Gln Val Asn Val Pro Arg Cys
145                 150                 155                 160
Leu His Phe Ser Gly Val Gly Lys Val Arg Gln Ala Ala Cys Gly Gly
                165                 170                 175
Thr Gly Cys Ala Val Leu Asn Gly Glu Gly His Val Phe Val Trp Gly
            180                 185                 190
Tyr Gly Ile Leu Gly Lys Gly Pro Asn Leu Val Glu Ser Ala Val Pro
        195                 200                 205
Glu Met Ile Pro Pro Thr Leu Phe Gly Leu Thr Glu Phe Asn Pro Glu
    210                 215                 220
Ile Gln Val Ser Arg Ile Arg Cys Gly Leu Ser His Phe Ala Ala Leu
225                 230                 235                 240
Thr Asn Lys Gly Glu Leu Phe Val Trp Gly Lys Asn Ile Arg Gly Cys
                245                 250                 255
Leu Gly Ile Gly Arg Leu Glu Asp Gln Tyr Phe Pro Trp Arg Val Thr
```

```
            260                 265                 270
Met Pro Gly Glu Pro Val Asp Val Ala Cys Gly Val Asp His Met Val
        275                 280                 285
Thr Leu Ala Lys Ser Phe Ile
    290                 295
```

<210> 1246
<211> 172
<212>Amino acid
<213> Homo sapiens

<400> 1246

```
Leu Pro Phe Arg Glu Trp Leu Met Ile Val Val Ser Leu Ser Ala Ala
  1               5                  10                  15
Ala Val Ala Ala Ala Phe Met Ala Lys Cys Arg Met Val Leu Ser Ser
             20                  25                  30
Arg Tyr Phe Cys Ser His Phe Val Met Ser Ala Ser Arg Ala Arg Ile
         35                  40                  45
Arg Ser Ser Phe Ser Arg Thr Ser Ser Arg Arg Ala Gly Ala Leu Tyr
     50                  55                  60
Ser Gly Met Leu Ala Gly Trp Pro Phe Pro Cys Phe Cys Trp Val Leu
 65                  70                  75                  80
Ser Ala Ser Ser Ser Leu Ser Ser Gln Val Arg Ser Leu Arg Ser Ile
                 85                  90                  95
Cys Ser Arg Phe Ser His Ala Asp Cys Ser Trp Val Arg Ala Cys Cys
            100                 105                 110
Ser Phe Ser Thr Phe Ser Thr Tyr Ala Cys Phe Ser Arg Asn Ser Ser
        115                 120                 125
Ser Ser Leu Met Thr Leu Ala Trp Ala Leu Leu Lys Ala Trp Ser Arg
    130                 135                 140
Ile Ser Met Cys Leu Arg Trp Ser Ser Leu Ala Val Arg Thr Ala Ala
145                 150                 155                 160
Asn Ser Ile Ser Asn Phe Ser Phe Ser Phe Lys Asn
                165                 170     172
```

<210> 1247
<211> 361
<212>Amino acid
<213> Homo sapiens

<400> 1247

```
Met Gln Ala Val Arg Ala Thr Ala Ser Gln Ser Leu Ser Cys Ala Arg
  1               5                  10                  15
Ala Pro Arg Glu Pro Thr Gln His Ala Leu Arg Ala His Trp Phe Pro
             20                  25                  30
Pro Ala Ala Ala Val Gln Pro Ser Pro His Ser Gly Val Ala Ala Ala
         35                  40                  45
Ala Gly Thr Trp Ser Ser Ala Phe Arg Gly Glu His Pro Leu Val Ser
     50                  55                  60
Ser Gly Leu Leu Leu Gly Val Arg Glu Gln Ser Phe Arg Leu Leu Arg
 65                  70                  75                  80
Ser Lys Ala Gly Thr His Met Tyr Leu Glu His Thr Ser His Cys Pro
                 85                  90                  95
His His Asp Asp Asp Thr Ala Met Asp Thr Pro Leu Pro Arg Pro Arg
```

```
            100                 105                 110
Pro Leu Leu Ala Val Glu Arg Thr Gly Gln Arg Pro Leu Trp Ala Pro
        115                 120                 125
Ser Leu Glu Leu Pro Lys Pro Asp Met Gln Pro Leu Pro Ala Gly Ala
    130                 135                 140
Phe Leu Glu Glu Val Ala Glu Gly Thr Pro Ala Gln Thr Glu Ser Glu
145                 150                 155                 160
Pro Lys Val Leu Asp Pro Glu Glu Asp Leu Leu Cys Ile Ala Lys Thr
                165                 170                 175
Phe Ser Tyr Leu Arg Glu Ser Gly Trp Tyr Trp Gly Ser Ile Thr Ala
            180                 185                 190
Ser Glu Ala Arg Gln His Leu Gln Lys Met Pro Glu Gly Thr Phe Leu
        195                 200                 205
Val Arg Asp Ser Thr His Pro Ser Tyr Leu Phe Thr Leu Ser Val Lys
    210                 215                 220
Thr Thr Arg Gly Pro Thr Asn Val Arg Ile Glu Tyr Ala Asp Ser Ser
225                 230                 235                 240
Phe Arg Leu Asp Ser Asn Cys Leu Ser Arg Pro Arg Ile Leu Ala Phe
                245                 250                 255
Pro Asp Val Val Ser Leu Val Gln His Tyr Val Ala Ser Cys Thr Ala
            260                 265                 270
Asp Thr Arg Ser Asp Ser Pro Asp Pro Ala Pro Thr Pro Ala Leu Pro
        275                 280                 285
Met Pro Lys Glu Asp Ala Pro Ser Asp Pro Ala Leu Pro Ala Pro Pro
    290                 295                 300
Pro Ala Thr Ala Val His Leu Lys Leu Val Gln Pro Phe Val Arg Arg
305                 310                 315                 320
Ser Ser Ala Arg Ser Leu Gln His Leu Cys Arg Leu Val Ile Asn Arg
                325                 330                 335
Leu Val Ala Asp Val Asp Cys Leu Pro Leu Pro Arg Arg Met Ala Asp
            340                 345                 350
Tyr Leu Arg Gln Tyr Pro Phe Gln Leu
        355                 360 361
```

<210> 1248
<211> 279
<212>Amino acid
<213> Homo sapiens

<400> 1248

```
Phe Val Asp Ile Phe Gln Arg Trp Lys Glu Cys Arg Gly Lys Ser Pro
  1               5                  10                  15
Ala Gln Ala Glu Leu Ser Tyr Leu Asn Lys Ala Lys Trp Leu Glu Met
            20                  25                  30
Tyr Gly Val Asp Met His Val Val Arg Gly Arg Asp Gly Cys Glu Tyr
        35                  40                  45
Ser Leu Gly Leu Thr Pro Thr Gly Ile Leu Ile Phe Glu Gly Ala Asn
    50                  55                  60
Lys Ile Gly Leu Phe Phe Trp Pro Lys Ile Thr Lys Met Asp Phe Lys
65                  70                  75                  80
Lys Ser Lys Leu Thr Leu Val Val Val Glu Asp Asp Asp Gln Gly Arg
                85                  90                  95
Glu Gln Glu His Thr Phe Val Phe Arg Leu Asp Ser Ala Arg Thr Cys
            100                 105                 110
Lys His Leu Trp Lys Cys Ala Val Glu His His Ala Phe Phe Arg Leu
        115                 120                 125
Arg Thr Pro Gly Asn Ser Lys Ser Asn Arg Ser Asp Phe Ile Arg Leu
    130                 135                 140
Gly Ser Arg Phe Arg Phe Ser Gly Arg Thr Glu Tyr Gln Ala Thr His
```

```
145                 150                 155                 160
Gly Ser Arg Leu Arg Arg Thr Ser Thr Phe Glu Arg Lys Pro Ser Lys
                165                 170                 175
Arg Tyr Pro Ser Arg Arg His Ser Thr Phe Lys Ala Ser Asn Pro Val
            180                 185                 190
Ile Ala Ala Gln Leu Cys Ser Lys Thr Asn Pro Glu Val His Asn Tyr
        195                 200                 205
Gln Pro Gln Tyr His Pro Asn Ile His Pro Ser Gln Pro Arg Trp His
    210                 215                 220
Pro His Ser Pro Asn Val Arg Pro Ser Phe Gln Asp Asp Arg Ser His
225                 230                 235                 240
Trp Lys Ala Ser Ala Ser Gly Asp Asp Ser His Phe Asp Tyr Val His
                245                 250                 255
Asp Gln Asn Gln Lys Asn Leu Gly Gly Met Gln Ser Met Met Tyr Arg
            260                 265                 270
Asp Lys Leu Met Thr Ala Leu
        275                 279
```

<210> 1249
<211> 255
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(255)
<223> X = any amino acid or stop code

<400> 1249

```
Gly Gly Ile Arg Leu Ile Gln Lys Leu Thr Trp Arg Ser Arg Gln Gln
 1               5                  10                  15
Asp Arg Glu Asn Cys Ala Met Lys Gly Lys His Lys Asp Glu Cys His
            20                  25                  30
Asn Phe Ile Lys Val Phe Val Pro Arg Asn Asp Glu Met Val Phe Val
        35                  40                  45
Cys Gly Thr Asn Ala Phe Asn Pro Met Cys Arg Tyr Tyr Arg Val Ser
    50                  55                  60
Ile Phe Tyr Val Ile Cys Phe Phe Xaa Ser Thr Phe Leu Pro Ser Leu
65                  70                  75                  80
Ile Cys Cys Xaa Ser Xaa Asn Leu Ser Ala Phe Gln Xaa Phe Val Leu
                85                  90                  95
Ser Leu Val Gln Xaa Lys Asn Lys Asp Arg Ile Leu Gln Met Glu Phe
            100                 105                 110
Xaa Tyr Lys Xaa Asn Ser Ile Ala Phe Lys Arg Ala Arg Xaa Ile Asp
        115                 120                 125
Met Thr Leu Ala Ile Tyr Phe Ser Phe Val Leu Ser Thr Leu Xaa Tyr
    130                 135                 140
Asp Gly Glu Glu Ile Ser Gly Leu Ala Arg Cys Pro Phe Asp Ala Arg
145                 150                 155                 160
Gln Thr Asn Gly Ala Leu Phe Ala Asp Gly Lys Leu Tyr Ser Ala Thr
                165                 170                 175
Val Ala Asp Phe Leu Ala Ser Asp Ala Val Ile Tyr Arg Ser Met Gly
            180                 185                 190
Asp Gly Ser Ala Leu Arg Thr Ile Lys Tyr Asp Ser Lys Trp Ile Lys
        195                 200                 205
Glu Pro His Phe Leu Tyr Ala Ile Lys Tyr Gly Asn Tyr Val Tyr Phe
    210                 215                 220
Ser Phe Arg Glu Ile Val Ala Thr Xaa Xaa Leu Gly Lys Ala Val Asp
225                 230                 235                 240
```

```
Ser Arg Val Ala Arg Tyr Glu Lys Gln Leu Val Gly Pro Thr Val
                245                 250                 255
```

<210> 1250
<211> 307
<212>Amino acid
<213> Homo sapiens

<400> 1250

```
Ala Arg Ala Leu Ala Arg Glu Arg Glu Ser Glu Ser Ala Arg Ala Asp
  1               5                  10                  15
Asp Val Thr Leu Gly Val Ser Ala Ile Leu Ala Val Asp Arg Gly Gly
            20                  25                  30
Asn Leu Gly Ser Ala Asp Gly Trp Ala Tyr Ile Asp Val Glu Val Arg
        35                  40                  45
Arg Pro Trp Ala Phe Val Gly Pro Gly Cys Ser Arg Ser Ser Gly Asn
    50                  55                  60
Gly Ser Thr Ala Tyr Gly Leu Val Gly Ser Pro Arg Trp Leu Ser Pro
65                  70                  75                  80
Phe His Thr Gly Gly Ala Val Ser Leu Pro Arg Arg Pro Arg Gly Pro
                85                  90                  95
Gly Pro Val Leu Gly Val Ala Arg Pro Cys Leu Arg Cys Val Leu Arg
            100                 105                 110
Pro Glu His Tyr Glu Pro Gly Ser His Tyr Ser Gly Phe Ala Gly Arg
        115                 120                 125
Asp Ala Ser Arg Ala Phe Val Thr Gly Asp Cys Ser Glu Ala Gly Leu
    130                 135                 140
Val Asp Asp Val Ser Asp Leu Ser Ala Ala Glu Met Leu Thr Leu His
145                 150                 155                 160
Asn Trp Leu Ser Phe Tyr Glu Lys Asn Tyr Val Cys Val Gly Arg Val
                165                 170                 175
Thr Gly Arg Phe Tyr Gly Glu Asp Gly Leu Pro Thr Pro Ala Leu Thr
            180                 185                 190
Gln Val Glu Ala Ala Ile Thr Arg Gly Leu Glu Ala Asn Lys Leu Gln
        195                 200                 205
Leu Gln Glu Lys Gln Thr Phe Pro Pro Cys Asn Ala Glu Trp Ser Ser
    210                 215                 220
Ala Arg Gly Ser Arg Leu Trp Cys Ser Gln Lys Ser Gly Gly Val Ser
225                 230                 235                 240
Arg Asp Trp Ile Gly Val Pro Arg Lys Leu Tyr Lys Pro Gly Ala Lys
                245                 250                 255
Glu Pro Arg Cys Val Cys Val Arg Thr Thr Gly Pro Pro Ser Gly Gln
            260                 265                 270
Met Pro Asp Asn Pro Pro His Arg Asn Arg Gly Asp Leu Asp His Pro
        275                 280                 285
Asn Leu Ala Glu Tyr Thr Gly Cys Pro Pro Leu Ala Ile Thr Cys Ser
    290                 295                 300
Phe Pro Leu
305     307
```

<210> 1251
<211> 100
<212>Amino acid
<213> Homo sapiens

<400> 1251

```
Tyr Phe Ile Ile Cys Arg Asp Gly Val Leu Leu Phe Cys Pro Gly Trp
 1               5                  10                  15
Ser Gln Thr Pro Gly Ala Gln Ala Ile Leu Leu His Trp Ala Thr Gln
            20                  25                  30
Asn Ala Gly Met Thr Asp Met Ser His Ser Ala Gln Pro Ile Tyr Leu
        35                  40                  45
Phe Ile Tyr Leu Ile Arg Thr Arg Ser His Tyr Val Ala Gln Ala Gly
    50                  55                  60
Gln Leu Leu Asp Ser Asn Asp Ser Pro Asn Val Ala Ser Gln Asn Val
65                  70                  75                  80
Gly Ile Thr Gly Met Ser His His Ala Trp Leu Lys Ile Val Leu Tyr
                85                  90                  95
Phe Cys Ile Ile
            100
```

<210> 1252
<211> 464
<212>Amino acid
<213> Homo sapiens

<400> 1252

```
Pro Ala Ala Arg Pro Pro Ser Leu Val Arg Leu Ser Pro Ser Pro Pro
 1               5                  10                  15
Lys Pro Arg Ala Arg Ala Arg Ala Pro Gln Ser Val Glu Pro Ala Ala
            20                  25                  30
Pro Leu Val Ala Arg Gly Ser Ser Pro Pro Ala Arg Pro Ala Pro Ala
        35                  40                  45
Met Val Arg Pro Arg Arg Ala Pro Tyr Arg Ser Gly Ala Gly Gly Pro
    50                  55                  60
Leu Gly Gly Arg Gly Arg Pro Pro Arg Pro Leu Val Val Arg Ala Val
65                  70                  75                  80
Arg Ser Arg Ser Trp Pro Ala Ser Pro Arg Gly Pro Gln Pro Pro Arg
                85                  90                  95
Ile Arg Ala Arg Ser Ala Pro Pro Met Glu Gly Ala Arg Val Phe Gly
            100                 105                 110
Ala Leu Gly Pro Ile Gly Pro Ser Ser Pro Gly Leu Thr Leu Gly Gly
        115                 120                 125
Leu Ala Val Ser Glu His Arg Leu Ser Asn Lys Leu Leu Ala Trp Ser
    130                 135                 140
Gly Val Leu Glu Trp Gln Glu Lys Arg Arg Pro Tyr Ser Asp Ser Thr
145                 150                 155                 160
Ala Lys Leu Lys Arg Thr Leu Pro Cys Gln Ala Tyr Val Asn Gln Gly
                165                 170                 175
Glu Asn Leu Glu Thr Asp Gln Trp Pro Gln Lys Leu Ile Met Gln Leu
            180                 185                 190
Ile Pro Gln Gln Leu Leu Thr Thr Leu Gly Pro Leu Phe Arg Asn Ser
        195                 200                 205
Gln Leu Ala Gln Phe His Phe Thr Asn Arg Asp Cys Asp Ser Leu Lys
    210                 215                 220
Gly Leu Cys Arg Ile Met Gly Asn Gly Phe Ala Gly Cys Met Leu Phe
225                 230                 235                 240
Pro His Ile Ser Pro Cys Glu Val Arg Val Leu Met Leu Leu Tyr Ser
                245                 250                 255
Ser Lys Lys Lys Ile Phe Met Gly Leu Ile Pro Tyr Asp Gln Ser Gly
            260                 265                 270
Phe Val Ser Ala Ile Arg Gln Val Ile Thr Thr Arg Lys Gln Ala Val
        275                 280                 285
```

```
Gly Pro Gly Gly Val Asn Ser Gly Pro Val Gln Ile Val Asn Asn Lys
    290                 295                 300
Phe Leu Ala Trp Ser Gly Val Met Glu Trp Gln Glu Pro Arg Pro Glu
305                 310                 315                 320
Pro Asn Ser Arg Ser Lys Arg Trp Leu Pro Ser His Val Tyr Val Asn
                325                 330                 335
Gln Gly Glu Ile Leu Arg Thr Glu Gln Trp Pro Arg Lys Leu Tyr Met
            340                 345                 350
Gln Leu Ile Pro Gln Gln Leu Leu Thr Thr Leu Val Pro Leu Phe Arg
        355                 360                 365
Asn Ser Arg Leu Val Gln Phe His Phe Thr Lys Asp Leu Glu Thr Leu
    370                 375                 380
Lys Ser Leu Cys Arg Ile Met Asp Asn Gly Phe Ala Gly Cys Val His
385                 390                 395                 400
Phe Ser Tyr Lys Ala Ser Cys Glu Ile Arg Val Leu Met Leu Leu Tyr
                405                 410                 415
Ser Ser Glu Lys Lys Ile Phe Ile Gly Leu Ile Pro His Asp Gln Gly
            420                 425                 430
Asn Phe Val Asn Gly Ile Arg Arg Val Ile Ala Asn Gln Gln Gln Val
        435                 440                 445
Leu Gln Arg Asn Leu Glu Gln Glu Gln Gln Gln Arg Gly Met Gly Gly
    450                 455                 460                 464
```

<210> 1253
<211> 214
<212>Amino acid
<213> Homo sapiens

<400> 1253

```
Gly Arg Pro Ala Leu Gly Arg Glu Ala Pro Pro Gln Ala Gly Leu Ser
  1               5                  10                  15
Ser Thr Pro Pro Pro Cys Ser Glu Thr Cys Thr Met Gly Pro His Ser
            20                  25                  30
Ile Leu Arg Thr Val His Cys Arg Pro Thr Lys Thr Pro Pro Glu Pro
        35                  40                  45
Ser Ala Glu Pro His Pro Leu Ser Leu Leu Thr Ser Ser Asn Thr Ser
    50                  55                  60
Leu Ala Gly Thr Ser Leu Gly Arg Asp Leu Thr Pro Gly Gly Gly Lys
65                  70                  75                  80
Pro Pro Ser Gly Gln Thr Pro Arg Asn Pro Glu Ser Pro Arg His Arg
                85                  90                  95
Leu Gly Ser Pro Arg Gly Arg Arg Trp Leu Ala Ser Pro Thr Pro Thr
            100                 105                 110
Gly Ser Gly Arg Ser Gly Pro Ala Ser Arg Gly Gln Arg Arg Leu Ser
        115                 120                 125
Cys Ala Ala Gln Asp Pro Thr Ser Glu Gly Ala Ser Val Gly Ala Met
    130                 135                 140
Glu Ala Gly Leu Gly Pro Pro Thr Ala Ala Pro Arg Gly Val Val Ser
145                 150                 155                 160
Glu Ala Ala Glu Ser Leu Gly Gly Thr Leu Ser Trp Gly Ala Trp Gly
                165                 170                 175
Arg Pro Pro Ala Gly Pro Ser Gly Leu Ala Gly Arg Arg Ser Arg Arg
            180                 185                 190
Glu Ala Leu Arg Pro Asp Arg Lys Glu Ala Ser Val Met Met Ala Ala
        195                 200                 205
Val Ser Ala Ile Gln Pro
    210             214
```

<210> 1254
<211> 198
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(198)
<223> X = any amino acid or stop code

<400> 1254

```
Pro Gly Val Pro Thr His Gly Trp Pro Arg Ser Arg Val Leu Thr Arg
  1               5                  10                  15
Val Arg Gly Ser Arg Gly Ser Gly Lys Met Ala Ala Ala Val Val Leu
            20                  25                  30
Ala Ala Gly Leu Arg Ala Ala Arg Arg Ala Val Ala Ala Thr Gly Val
        35                  40                  45
Arg Gly Gly Gln Val Arg Gly Ala Ala Gly Val Thr Asp Gly Asn Glu
    50                  55                  60
Val Ala Lys Ala Gln Gln Ala Thr Pro Gly Gly Ala Ala Pro Thr Ile
65                  70                  75                  80
Phe Ser Arg Ile Leu Asp Lys Ser Leu Pro Ala Asp Ile Leu Tyr Glu
                85                  90                  95
Asp Gln Gln Cys Leu Val Phe Arg Asp Val Ala Pro Gln Ala Pro Val
            100                 105                 110
His Phe Leu Val Ile Pro Lys Lys Pro Ile Pro Arg Ile Ser Gln Ala
        115                 120                 125
Glu Glu Glu Asp Gln Gln Leu Thr Tyr Val Pro Pro Leu Ser Leu Xaa
    130                 135                 140
Leu Leu Gly His Leu Leu Leu Val Ala Lys Gln Thr Ala Lys Ala Glu
145                 150                 155                 160
Gly Leu Gly Asp Gly Tyr Arg Leu Val Ile Asn Asp Gly Lys Leu Gly
                165                 170                 175
Ala Gln Ser Val Tyr His Leu His Ile His Val Leu Gly Gly Arg Gln
            180                 185                 190
Leu Gln Trp Pro Pro Gly
        195         198
```

<210> 1255
<211> 458
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(458)
<223> X = any amino acid or stop code

<400> 1255

```
Val Pro Asn Tyr Leu Pro Ser Val Ser Ser Ala Ile Gly Gly Glu Val
  1               5                  10                  15
Pro Gln Arg Tyr Val Trp Arg Phe Cys Ile Gly Leu His Ser Ala Pro
            20                  25                  30
```

```
Arg Phe Leu Val Ala Phe Ala Tyr Trp Asn His Tyr Leu Ser Cys Thr
         35                  40                  45
Ser Pro Cys Ser Cys Tyr Arg Pro Leu Cys Arg Leu Asn Phe Gly Leu
     50                  55                  60
Asn Val Val Glu Asn Leu Ala Leu Leu Val Leu Thr Tyr Val Ser Ser
 65                  70                  75                  80
Ser Glu Asp Phe Thr Trp Val Pro Gly Xaa Gly Arg Ser Gly Glu Val
                 85                  90                  95
Phe Pro Glu Gly Thr Gly Leu Pro Leu Pro His Ser Asp Leu Pro Thr
            100                 105                 110
Ser Trp Cys Gly His Ser Leu Gln Cys Gly Ser Gln Ser Ser Phe Pro
        115                 120                 125
Pro Ala Ile His Glu Asn Ala Phe Ile Val Phe Ile Ala Ser Ser Leu
    130                 135                 140
Gly His Met Leu Leu Thr Cys Ile Leu Trp Arg Leu Thr Lys Lys His
145                 150                 155                 160
Thr Val Ser Gln Glu Asp Gly Leu Ser Leu Ala Gly Ala Pro Arg Gln
                165                 170                 175
Pro Arg Arg Lys Ser Arg Thr Ser Val Leu Arg Ile Arg Val Met Val
            180                 185                 190
Arg Trp Glu Leu Ser Ser Asn Gly Asn Pro Gly Arg Gly Val Leu Gly
        195                 200                 205
Leu Gly Leu Gly Leu Gly Asn Lys Leu Arg Val Val Gly Gln Asn Leu
    210                 215                 220
Gly Leu Xaa His Cys Val Trp Val Val Trp Glu Thr Gly Glu Xaa Lys
225                 230                 235                 240
Arg Trp Arg Leu Gln Met Gly Ile Glu Xaa Gly Val Ala Ser Arg Arg
                245                 250                 255
Gln Xaa Val Arg Asn Ser Val Arg Gly Leu Val Cys His Asn Ser Ser
            260                 265                 270
Ala Pro Pro Met Tyr Met Gly Phe Phe Ser Pro Thr Val Phe Gly Gly
        275                 280                 285
Gly Val Gly Gly Xaa Leu His Val Thr Phe Ile Leu His Pro Pro Glu
    290                 295                 300
Val Glu Ala Ala Gly Ile Pro Leu Leu Leu Gly Pro Ser Leu Pro Gln
305                 310                 315                 320
Arg Gln Gly Arg Glu His Ile Val Val Ile Leu Ala Ala Pro Ala Cys
                325                 330                 335
Ala Pro Phe His Asp Arg Xaa Trp Glu Pro Arg Glu Ile Arg Pro Ser
            340                 345                 350
Pro Xaa Glu Leu Gly Leu Arg Gly Glu Pro Thr Leu Ser Tyr Pro Ala
        355                 360                 365
Ser Cys Arg Val Ile Arg Gln Pro Ile Pro Xaa Asp Arg Lys Ser Tyr
    370                 375                 380
Ser Trp Lys Gln Arg Leu Phe Ile Ile Asn Phe Ile Ser Phe Phe Ser
385                 390                 395                 400
Ala Leu Ala Val Tyr Phe Arg His Asn Met Tyr Cys Glu Ala Gly Val
                405                 410                 415
Tyr Thr Ile Phe Ala Ile Leu Glu Tyr Thr Val Val Leu Thr Asn Met
            420                 425                 430
Ala Phe His Met Thr Ala Trp Trp Asp Phe Gly Asn Lys Glu Leu Leu
        435                 440                 445
Ile Thr Ser Gln Pro Glu Glu Lys Arg Phe
    450                 455         458
```

<210> 1256
<211> 83
<212>Amino acid
<213> Homo sapiens

<400> 1256

```
Ile Asp Leu Leu Glu Ile Arg Asn Gly Pro Arg Ser His Glu Ser Phe
 1               5                  10                  15
Gln Glu Met Asp Leu Asn Asp Asp Trp Lys Leu Ser Lys Asp Glu Val
            20                  25                  30
Lys Ala Tyr Leu Lys Lys Glu Phe Glu Lys His Gly Ala Val Val Asn
        35                  40                  45
Glu Ser His His Asp Ala Leu Val Glu Asp Ile Phe Asp Lys Glu Asp
    50                  55                  60
Glu Asp Lys Asp Gly Phe Ile Ser Ala Arg Glu Phe Thr Tyr Lys His
65                  70                  75                  80
Asp Glu Leu
        83
```

<210> 1257
<211> 203
<212>Amino acid
<213> Homo sapiens

<400> 1257

```
Pro Arg Val Arg Gly Arg Val Gly Lys Glu Gly Ala Ala Ala Lys Pro
 1               5                  10                  15
Arg Ser Leu Leu Arg Arg Phe Gln Leu Leu Ser Trp Ser Val Cys Gly
            20                  25                  30
Gly Asn Lys Asp Pro Trp Val Gln Glu Leu Met Ser Cys Leu Asp Leu
        35                  40                  45
Lys Glu Cys Gly His Ala Tyr Ser Gly Ile Val Ala His Gln Lys His
    50                  55                  60
Leu Leu Pro Thr Ser Pro Pro Ile Ser Gln Ala Ser Glu Gly Ala Ser
65                  70                  75                  80
Ser Asp Ile His Thr Pro Ala Gln Met Leu Leu Ser Thr Leu Gln Ser
                85                  90                  95
Thr Gln Arg Pro Thr Leu Pro Val Gly Ser Leu Ser Ser Asp Lys Glu
            100                 105                 110
Leu Thr Arg Pro Asn Glu Thr Thr Ile His Thr Ala Gly His Ser Leu
        115                 120                 125
Ala Ala Gly Pro Glu Ala Gly Glu Asn Gln Lys Gln Pro Glu Lys Asn
    130                 135                 140
Ala Gly Pro Thr Ala Arg Thr Ser Ala Thr Val Pro Val Leu Cys Leu
145                 150                 155                 160
Leu Ala Ile Ile Phe Ile Leu Thr Ala Ala Leu Ser Tyr Val Leu Cys
                165                 170                 175
Lys Arg Arg Arg Gly Gln Ser Pro Gln Ser Ser Pro Asp Leu Pro Val
            180                 185                 190
His Tyr Ile Pro Val Ala Pro Asp Ser Asn Thr
        195                 200         203
```

<210> 1258
<211> 195
<212>Amino acid
<213> Homo sapiens

<400> 1258

```
Leu Ile Ile Ser Asn Phe Leu Lys Ala Lys Gln Lys Pro Gly Ser Thr
 1               5                  10                  15
Pro Asn Leu Gln Gln Lys Lys Ser Gln Ala Arg Leu Ala Pro Asp Ile
            20                  25                  30
Val Ser Ala Ser Gln Tyr Arg Lys Phe Asp Glu Phe Gln Thr Gly Ile
        35                  40                  45
Leu Ile Tyr Glu Leu Leu His Gln Pro Asn Pro Phe Glu Val Arg Ala
    50                  55                  60
Gln Leu Arg Glu Arg Asp Tyr Arg Gln Glu Asp Leu Pro Pro Leu Pro
65                  70                  75                  80
Ala Leu Ser Leu Tyr Ser Pro Gly Leu Gln Gln Leu Ala His Leu Leu
                85                  90                  95
Leu Glu Ala Asp Pro Ile Lys Arg Ile Arg Ile Gly Glu Ala Lys Arg
            100                 105                 110
Val Leu Gln Cys Leu Leu Trp Gly Pro Arg Arg Glu Leu Val Gln Gln
        115                 120                 125
Pro Gly Thr Ser Glu Glu Ala Leu Cys Gly Thr Leu His Asn Trp Ile
    130                 135                 140
Asp Met Lys Arg Ala Leu Met Met Met Lys Phe Ala Glu Lys Ala Val
145                 150                 155                 160
Asp Arg Arg Arg Gly Val Glu Leu Glu Asp Trp Leu Cys Cys Gln Tyr
                165                 170                 175
Leu Ala Ser Ala Glu Pro Gly Ala Leu Leu Gln Ser Leu Lys Leu Leu
            180                 185                 190
Gln Leu Leu
        195
```

<210> 1259
<211> 672
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(672)
<223> X = any amino acid or stop code

<400> 1259

```
Lys Arg Gly Leu Ile Val Val Met Ala His Glu Met Ile Gly Thr Gln
 1               5                  10                  15
Ile Val Thr Glu Arg Gly Val Ala Leu Leu Glu Ser Gly Thr Glu Lys
            20                  25                  30
Val Leu Leu Ile Asp Ser Arg Pro Phe Val Glu Tyr Asn Thr Ser His
        35                  40                  45
Ile Leu Glu Ala Ile Asn Ile Asn Cys Ser Lys Leu Met Lys Arg Arg
    50                  55                  60
Leu Gln Gln Asp Lys Val Leu Ile Thr Glu Leu Ile Gln His Ser Ala
65                  70                  75                  80
Lys His Lys Val Asp Ile Asp Cys Ser Gln Lys Val Val Val Tyr Asp
                85                  90                  95
Gln Ser Ser Gln Asp Val Ala Ser Leu Ser Ser Asp Cys Phe Leu Thr
            100                 105                 110
Val Leu Leu Gly Lys Leu Glu Lys Ser Phe Asn Ser Val His Leu Leu
        115                 120                 125
Ala Gly Gly Phe Ala Glu Phe Ser Arg Cys Phe Pro Gly Leu Cys Glu
    130                 135                 140
Gly Lys Ser Thr Leu Val Pro Thr Cys Ile Ser Gln Pro Cys Leu Pro
145                 150                 155                 160
Val Ala Asn Ile Gly Pro Thr Arg Ile Leu Pro Asn Leu Tyr Leu Gly
```

```
                165                 170                 175
Cys Gln Arg Asp Val Leu Asn Lys Glu Leu Met Gln Gln Asn Gly Ile
            180                 185                 190
Gly Tyr Val Leu Asn Ala Ser Asn Thr Cys Pro Lys Pro Asp Phe Ile
        195                 200                 205
Pro Glu Ser His Phe Leu Arg Val Pro Val Asn Asp Ser Phe Cys Glu
    210                 215                 220
Lys Ile Leu Pro Trp Leu Asp Lys Ser Val Asp Phe Ile Glu Lys Ala
225                 230                 235                 240
Lys Ala Ser Asn Gly Cys Val Leu Val His Cys Leu Ala Gly Ile Ser
                245                 250                 255
Arg Ser Ala Thr Ile Ala Ile Ala Tyr Ile Met Lys Arg Met Asp Met
            260                 265                 270
Ser Leu Asp Glu Ala Tyr Arg Phe Val Lys Glu Lys Arg Pro Thr Ile
        275                 280                 285
Ser Pro Asn Phe Asn Phe Leu Gly Gln Leu Leu Asp Tyr Glu Lys Lys
    290                 295                 300
Ile Lys Asn Gln Thr Gly Ala Ser Gly Pro Lys Ser Lys Leu Lys Leu
305                 310                 315                 320
Leu His Leu Glu Lys Pro Asn Glu Pro Val Pro Ala Val Ser Glu Gly
                325                 330                 335
Gly Gln Lys Ser Glu Thr Pro Leu Ser Pro Pro Cys Ala Asp Ser Ala
            340                 345                 350
Thr Ser Glu Ala Ala Gly Gln Arg Pro Val His Pro Ala Ser Val Pro
        355                 360                 365
Ser Val Pro Ser Val Gln Pro Ser Leu Leu Glu Asp Ser Pro Leu Val
    370                 375                 380
Gln Ala Leu Ser Gly Leu His Leu Ser Ala Asp Arg Leu Glu Asp Ser
385                 390                 395                 400
Asn Lys Leu Lys Arg Ser Phe Ser Leu Asp Ile Lys Ser Val Ser Tyr
                405                 410                 415
Ser Ala Ser Met Ala Ala Ser Leu His Gly Phe Ser Ser Ser Glu Asp
            420                 425                 430
Ala Leu Glu Tyr Tyr Lys Pro Ser Thr Thr Leu Asp Gly Thr Asn Lys
        435                 440                 445
Leu Cys Gln Phe Ser Pro Val Gln Glu Leu Cys Gly Ala Asp Ser Arg
    450                 455                 460
Asn Gln Ser Xaa Xaa Gly Gly Ser Gln Pro Ser Pro Arg Ser Cys Arg
465                 470                 475                 480
Pro Pro Gly Leu Gln Thr Ala Arg Ala Ser Asp Cys Ile Arg Ser Glu
                485                 490                 495
Pro Ala Ala Val Ala Pro Pro Arg Gly Pro Phe Tyr Leu His Cys Ile
            500                 505                 510
Glu Val Gly Ala Trp Arg Thr Ile Thr Thr Pro Ala Ser Phe Ser Ala
        515                 520                 525
Phe Pro Pro Pro Ala Ala Pro His Glu Val Cys Trp Pro Gly Pro Xaa
    530                 535                 540
Gly Leu Ala Pro Asp Ile Leu Ala Pro Gln Thr Ser Thr Pro Ser Leu
545                 550                 555                 560
Thr Ser Ser Trp Tyr Phe Ala Thr Glu Ser Ser His Phe Tyr Ser Ala
                565                 570                 575
Ser Ala Ile Tyr Gly Gly Ser Ala Ser Tyr Ser Ala Tyr Ser Cys Ser
            580                 585                 590
Gln Leu Pro Thr Cys Gly Asp Gln Val Tyr Ser Val Arg Arg Arg Gln
        595                 600                 605
Lys Pro Ser Asp Arg Ala Asp Ser Arg Arg Ser Trp His Glu Glu Ser
    610                 615                 620
Pro Phe Glu Lys Gln Phe Lys Arg Arg Ser Cys Gln Met Glu Phe Gly
625                 630                 635                 640
Glu Ser Ile Met Ser Glu Asn Arg Ser Arg Glu Glu Leu Gly Lys Val
                645                 650                 655
Gly Ser Gln Ser Ser Phe Ser Gly Ser Met Glu Ile Ile Glu Val Ser
            660                 665                 670     672
```

<210> 1260
<211> 260
<212>Amino acid
<213> Homo sapiens

<400> 1260
Ala Ser Ser Ser Lys Arg Val Ser Arg Gln Lys Met Leu Gln Leu Trp
1 5 10 15
Lys Leu Val Leu Leu Cys Gly Val Leu Thr Gly Thr Ser Glu Ser Leu
20 25 30
Leu Asp Asn Leu Gly Asn Asp Leu Ser Asn Val Val Asp Lys Leu Glu
35 40 45
Pro Val Leu His Glu Gly Leu Glu Thr Val Asp Asn Thr Leu Lys Gly
50 55 60
Ile Leu Glu Lys Leu Lys Val Asp Leu Gly Val Leu Gln Lys Ser Ser
65 70 75 80
Ala Trp Gln Leu Ala Lys Gln Lys Ala Gln Glu Ala Glu Lys Leu Leu
85 90 95
Asn Asn Val Ile Ser Lys Leu Leu Pro Thr Asn Thr Asp Ile Phe Gly
100 105 110
Leu Lys Ile Ser Asn Ser Leu Ile Leu Asp Val Lys Ala Glu Pro Ile
115 120 125
Asp Asp Gly Lys Gly Leu Asn Leu Ser Phe Pro Val Thr Ala Asn Val
130 135 140
Thr Glu Ala Gly Pro Ile Ile Asp Gln Ile Ile Asn Leu Arg Ala Ser
145 150 155 160
Leu Asp Leu Leu Thr Ala Val Thr Ile Glu Thr Asp Pro Gln Thr His
165 170 175
His Pro Val Ala Gly Leu Gly Glu Cys Ala Arg Asp Pro Thr Ser Ile
180 185 190
Ser Leu Cys Leu Leu Asp Lys His Ser Gln Ile Ile Asn Lys Phe Val
195 200 205
Asn Ser Val Ile Asn Thr Leu Lys Ser Thr Val Ser Ser Leu Leu Gln
210 215 220
Lys Glu Ile Cys Pro Leu Ile Arg Ile Phe Ile His Ser Leu Asp Val
225 230 235 240
Asn Val Ile Gln Gln Val Val Asp Asn Pro Gln His Lys Thr Gln Leu
245 250 255
Gln Thr Leu Ile
260

<210> 1261
<211> 278
<212>Amino acid
<213> Homo sapiens

<400> 1261
Cys Ser Leu Arg Arg Pro Arg Ser Ala Ala Glu Pro Asp Ala Asp His
1 5 10 15
Val Pro Leu Leu Gly Leu Leu Arg Leu Gln Leu Arg Ala Ala Arg Gln
20 25 30
Pro Gly Ala Met Arg Pro Gln Gly Pro Ala Ala Ser Pro Gln Arg Leu

```
          35                  40                  45
Arg Gly Leu Leu Leu Leu Leu Leu Gln Leu Pro Ala Pro Ser Ser
      50                  55                  60
Ala Ser Glu Ile Pro Lys Gly Lys Gln Lys Ala Gln Leu Arg Gln Arg
 65                  70                  75                  80
Glu Val Val Asp Leu Tyr Asn Gly Met Cys Leu Gln Gly Pro Ala Gly
                 85                  90                  95
Val Pro Gly Arg Asp Gly Ser Pro Gly Ala Asn Gly Ile Pro Gly Thr
            100                 105                 110
Pro Gly Ile Pro Gly Arg Asp Gly Phe Lys Gly Glu Lys Gly Glu Cys
        115                 120                 125
Leu Arg Glu Ser Phe Glu Glu Ser Trp Thr Pro Asn Tyr Lys Gln Cys
    130                 135                 140
Ser Trp Ser Ser Leu Asn Tyr Gly Ile Asp Leu Gly Lys Ile Ala Glu
145                 150                 155                 160
Cys Thr Phe Thr Lys Met Arg Ser Asn Ser Ala Leu Arg Val Leu Phe
                165                 170                 175
Ser Gly Ser Leu Arg Leu Lys Cys Arg Asn Ala Cys Cys Gln Arg Trp
            180                 185                 190
Tyr Phe Thr Phe Asn Gly Ala Glu Cys Ser Gly Pro Leu Pro Ile Glu
        195                 200                 205
Ala Ile Ile Tyr Leu Asp Gln Gly Ser Pro Glu Met Asn Ser Thr Ile
    210                 215                 220
Asn Ile His Arg Thr Ser Ser Val Glu Gly Leu Cys Glu Gly Ile Gly
225                 230                 235                 240
Ala Gly Leu Val Asp Val Ala Ile Trp Val Gly Thr Cys Ser Asp Tyr
                245                 250                 255
Pro Lys Gly Asp Ala Ser Thr Gly Trp Asn Ser Val Ser Arg Ile Ile
            260                 265                 270
Ile Glu Glu Leu Pro Lys
        275         278
```

<210> 1262
<211> 362
<212>Amino acid
<213> Homo sapiens

<400> 1262

```
Met His Ser Ala Met Leu Gly Thr Arg Val Asn Leu Ser Val Ser Asp
 1               5                  10                  15
Phe Trp Arg Val Met Met Arg Val Cys Trp Leu Val Arg Gln Asp Ser
            20                  25                  30
Arg His Gln Arg Ile Arg Leu Pro His Leu Glu Ala Val Val Ile Gly
        35                  40                  45
Arg Gly Pro Glu Thr Lys Ile Thr Asp Lys Lys Cys Ser Arg Gln Gln
    50                  55                  60
Val Gln Leu Lys Ala Glu Cys Asn Lys Gly Tyr Val Lys Val Lys Gln
65                  70                  75                  80
Val Gly Val Asn Pro Thr Ser Ile Asp Ser Val Val Ile Gly Lys Asp
                85                  90                  95
Gln Glu Val Lys Leu Gln Pro Gly Gln Val Leu His Met Val Asn Glu
            100                 105                 110
Leu Tyr Pro Tyr Ile Val Glu Phe Glu Glu Glu Ala Lys Asn Pro Gly
        115                 120                 125
Leu Glu Thr His Arg Lys Arg Lys Arg Ser Gly Asn Ser Asp Ser Ile
    130                 135                 140
Glu Arg Asp Ala Ala Gln Glu Ala Glu Ala Gly Thr Gly Leu Glu Pro
145                 150                 155                 160
Gly Ser Asn Ser Gly Gln Cys Ser Val Pro Leu Lys Lys Gly Lys Asp
```

```
                165                 170                 175
Ala Pro Ile Lys Lys Glu Ser Leu Gly His Trp Ser Gln Gly Leu Lys
            180                 185                 190
Ile Ser Met Gln Asp Pro Lys Met Gln Val Tyr Lys Asp Glu Gln Val
        195                 200                 205
Val Val Ile Lys Asp Lys Tyr Pro Lys Ala Arg Tyr His Trp Leu Val
    210                 215                 220
Leu Pro Trp Thr Ser Ile Ser Ser Leu Lys Ala Val Ala Arg Glu His
225                 230                 235                 240
Leu Glu Leu Leu Lys His Met His Thr Val Gly Glu Lys Val Ile Val
                245                 250                 255
Asp Phe Ala Gly Ser Ser Lys Leu Arg Phe Arg Leu Gly Tyr His Ala
            260                 265                 270
Ile Pro Ser Met Ser His Val His Leu His Val Ile Ser Gln Asp Phe
        275                 280                 285
Asp Ser Pro Cys Leu Lys Asn Lys Lys His Trp Asn Ser Phe Asn Thr
    290                 295                 300
Glu Tyr Phe Leu Glu Ser Gln Ala Val Ile Glu Met Val Gln Glu Ala
305                 310                 315                 320
Gly Arg Val Thr Val Arg Asp Gly Met Pro Glu Leu Leu Lys Leu Pro
                325                 330                 335
Leu Arg Cys His Glu Cys Gln Gln Leu Leu Pro Ser Ile Pro Gln Leu
            340                 345                 350
Lys Glu His Leu Arg Lys His Trp Thr Gln
        355                 360     362
```

<210> 1263
<211> 618
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(618)
<223> X = any amino acid or stop code

<400> 1263

```
Asp Met Ser Asp Thr Ser Glu Ser Gly Ala Gly Leu Thr Arg Phe Gln
  1               5                  10                  15
Ala Glu Ala Ser Glu Lys Asp Ser Ser Ser Met Met Gln Thr Leu Leu
             20                  25                  30
Thr Val Thr Gln Asn Val Glu Val Pro Glu Thr Pro Lys Ala Ser Lys
         35                  40                  45
Ala Leu Glu Val Ser Glu Asp Val Lys Val Ser Lys Ala Ser Gly Val
     50                  55                  60
Ser Lys Ala Thr Glu Val Ser Lys Thr Pro Glu Ala Arg Glu Ala Pro
 65                  70                  75                  80
Ala Thr Gln Ala Ser Ser Thr Thr Gln Leu Thr Asp Thr Gln Val Leu
                 85                  90                  95
Ala Ala Glu Asn Lys Ser Leu Ala Ala Asp Thr Lys Lys Gln Asn Ala
            100                 105                 110
Asp Pro Gln Ala Val Thr Met Pro Ala Thr Glu Thr Lys Lys Val Ser
        115                 120                 125
His Val Ala Asp Thr Lys Val Asn Thr Lys Ala Gln Glu Thr Glu Ala
    130                 135                 140
Ala Pro Ser Gln Ala Pro Ala Asp Glu Pro Glu Pro Glu Ser Ala Ala
145                 150                 155                 160
Ala Gln Ser Gln Glu Asn Gln Asp Thr Arg Pro Lys Val Lys Ala Lys
                165                 170                 175
```

```
Lys Ala Arg Lys Val Lys His Leu Asp Gly Glu Glu Asp Gly Ser Ser
            180                 185                 190
Asp Gln Ser Gln Ala Ser Gly Thr Thr Gly Gly Arg Arg Val Ser Lys
        195                 200                 205
Ala Leu Met Ala Ser Met Ala Arg Arg Ala Ser Arg Gly Pro Ile Ala
    210                 215                 220
Phe Trp Ala Arg Arg Ala Ser Arg Thr Arg Leu Ala Cys Phe Gly Pro
225                 230                 235                 240
Gly Glu Pro Leu Leu Ser Pro Trp Arg Ser Pro Lys Ala Arg Arg Gln
                245                 250                 255
Arg Gly Phe Ala Val Arg Val Ala Lys Phe Gln Ser Ser Gln Glu Pro
            260                 265                 270
Glu Ala Pro Pro Pro Trp Asp Val Ala Leu Leu Gln Gly Arg Ala Asn
        275                 280                 285
Asp Leu Val Lys Tyr Leu Leu Ala Lys Asp Gln Thr Lys Ile Pro Ile
    290                 295                 300
Lys Arg Ser Asp Met Leu Lys Asp Ile Ile Lys Glu Tyr Thr Asp Val
305                 310                 315                 320
Tyr Pro Glu Ile Ile Glu Arg Ala Gly Tyr Ser Leu Glu Lys Val Phe
                325                 330                 335
Gly Ile Gln Leu Lys Glu Ile Asp Lys Asn Asp His Leu Tyr Ile Leu
            340                 345                 350
Leu Ser Thr Leu Glu Pro Thr Asp Ala Gly Ile Leu Gly Thr Thr Lys
        355                 360                 365
Asp Ser Pro Lys Leu Gly Leu Leu Met Val Leu Leu Ser Ile Ile Phe
    370                 375                 380
Met Asn Gly Asn Arg Ser Ser Glu Ala Val Ile Trp Glu Val Leu Arg
385                 390                 395                 400
Arg Ser Leu Gly Leu Arg Leu Gly Ile His His Ser Leu Leu Gly Asp
                405                 410                 415
Val Lys Lys Leu Ile Thr Asp Glu Val Val Lys Gln Lys Tyr Leu Asp
            420                 425                 430
Tyr Ala Arg Val Pro His Ser Asn Ser Pro Glu Tyr Glu Phe Phe Trp
        435                 440                 445
Gly Leu Arg Ser Tyr Tyr Glu Asp Gln Gln Arg Xaa Lys Ser Phe Lys
    450                 455                 460
Phe Ala Cys Lys Val Gln Lys Lys Asp Pro Lys Glu Trp Ala Ala Gln
465                 470                 475                 480
Ser Pro Pro Gly Lys Ala Arg Glu Arg Met Glu Ala Asp Leu Lys Ala
                485                 490                 495
Ala Ser Xaa Gly Ser Pro Trp Lys Pro Arg Leu Arg Ala Glu Ile Lys
            500                 505                 510
Ala Arg Met Gly Ile Gly Leu Gly Ser Glu Asn Ala Ala Gly Pro Cys
        515                 520                 525
Asn Trp Asp Glu Ala Asp Ile Gly Pro Trp Ala Lys Ala Arg Ile Gln
    530                 535                 540
Ala Gly Ala Glu Ala Lys Ala Lys Ala Gln Glu Ser Gly Ser Ala Ser
545                 550                 555                 560
Thr Gly Ala Ser Thr Ser Thr Asn Asn Ser Ala Ser Ala Ser Ala Ser
                565                 570                 575
Thr Ser Gly Gly Phe Ser Ala Gly Ala Ser Leu Thr Ala Thr Leu Thr
            580                 585                 590
Phe Gly Leu Phe Ala Gly Leu Gly Gly Ala Gly Ala Ser Thr Ser Gly
        595                 600                 605
Ser Ser Gly Ala Cys Gly Phe Ser Tyr Lys
    610                 615         618
```

<210> 1264
<211> 464
<212>Amino acid
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(464)
<223> X = any amino acid or stop code

<400> 1264

```
Ala Arg Pro Pro Val Cys Thr Gly Ser Thr Met Ser Leu Thr Val Val
  1               5                  10                  15
Ser Met Ala Cys Val Gly Phe Phe Leu Leu Gln Gly Ala Trp Pro Leu
            20                  25                  30
Met Gly Gly Gln Asp Lys Pro Phe Leu Ser Ala Arg Pro Ser Thr Val
        35                  40                  45
Val Pro Arg Gly Gly His Val Ala Leu Gln Cys His Tyr Arg Arg Gly
    50                  55                  60
Phe Asn Asn Phe Met Leu Tyr Lys Glu Asp Arg Ser His Val Pro Ile
65                  70                  75                  80
Phe His Gly Arg Ile Phe Gln Glu Ser Phe Ile Met Gly Pro Val Thr
                85                  90                  95
Pro Ala His Ala Gly Thr Tyr Arg Cys Arg Gly Ser Arg Pro His Ser
            100                 105                 110
Leu Thr Gly Trp Ser Ala Pro Ser Asn Pro Leu Val Ile Met Val Thr
        115                 120                 125
Gly Asn His Arg Lys Pro Ser Leu Leu Ala His Pro Gly Pro Leu Leu
    130                 135                 140
Lys Ser Gly Glu Thr Val Ile Leu Gln Cys Trp Ser Asp Ile Met Phe
145                 150                 155                 160
Glu His Phe Phe Leu His Lys Glu Gly Ile Ser Lys Asp Pro Ser Arg
                165                 170                 175
Leu Val Gly Gln Ile His Asp Gly Val Ser Lys Ala Asn Phe Ser Ile
            180                 185                 190
Gly Pro Met Met Leu Ala Leu Ala Gly Thr Tyr Arg Cys Tyr Gly Ser
        195                 200                 205
Val Thr His Thr Pro Tyr Gln Leu Ser Ala Pro Ser Asp Pro Leu Asp
    210                 215                 220
Ile Val Val Thr Gly Pro Tyr Glu Lys Pro Ser Leu Ser Ala Gln Pro
225                 230                 235                 240
Gly Pro Lys Val Gln Ala Gly Glu Ser Val Thr Leu Ser Cys Ser Ser
                245                 250                 255
Arg Ser Ser Tyr Asp Met Tyr His Leu Ser Arg Glu Gly Gly Ala His
            260                 265                 270
Glu Arg Arg Leu Pro Ala Val Arg Lys Val Asn Arg Thr Phe Gln Ala
        275                 280                 285
Asp Phe Pro Leu Gly Pro Ala Thr His Gly Gly Thr Tyr Arg Cys Phe
    290                 295                 300
Gly Ser Phe Arg His Ser Pro Tyr Glu Trp Ser Asp Pro Ser Asp Pro
305                 310                 315                 320
Leu Leu Val Ser Val Thr Gly Asn Pro Ser Ser Ser Trp Pro Ser Pro
                325                 330                 335
Thr Glu Pro Ser Ser Lys Ser Gly Asn Leu Arg His Leu His Ile Leu
            340                 345                 350
Ile Gly Thr Ser Val Val Lys Ile Pro Phe Thr Ile Leu Leu Phe Phe
        355                 360                 365
Leu Leu His Arg Trp Cys Ser Asn Lys Lys Asn Ala Ala Val Met Asp
    370                 375                 380
Gln Glu Pro Ala Gly Asn Arg Val Asn Ser Glu Asp Ser Asp Glu Gln
385                 390                 395                 400
Asp His Gln Glu Val Ser Tyr Pro Xaa Leu Glu His Cys Val Phe Thr
                405                 410                 415
Gln Arg Lys Ile Thr Arg Pro Ser Gln Arg Pro Lys Thr Pro Pro Thr
            420                 425                 430
Asp Thr Ser Met Tyr Ile Glu Leu Pro Asn Ala Glu Pro Arg Ser Lys
```

```
        435                 440                 445
Val Val Phe Cys Pro Arg Ala Pro Gln Ser Gly Leu Glu Gly Ile Phe
    450                 455                 460             464
```

<210> 1265
<211> 1879
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1879)
<223> X = any amino acid or stop code

<400> 1265

```
Leu His Asn Leu Arg Glu Arg Tyr Phe Ser Gly Leu Ile Tyr Thr Tyr
  1               5                  10                  15
Ser Gly Leu Phe Cys Val Val Val Asn Pro Tyr Lys His Leu Pro Ile
             20                  25                  30
Tyr Ser Glu Lys Ile Val Asp Met Tyr Lys Gly Lys Lys Arg His Glu
         35                  40                  45
Met Pro Pro His Ile Tyr Ala Ile Ala Asp Thr Ala Tyr Arg Ser Met
     50                  55                  60
Leu Gln Asp Arg Glu Asp Gln Ser Ile Leu Cys Thr Gly Glu Ser Gly
 65                  70                  75                  80
Ala Gly Lys Thr Glu Asn Thr Lys Lys Val Ile Gln Tyr Leu Ala Val
                 85                  90                  95
Val Ala Ser Ser His Lys Gly Lys Lys Asp Thr Ser Ile Thr Gly Glu
            100                 105                 110
Leu Glu Lys Gln Leu Leu Gln Ala Asn Pro Ile Leu Glu Ala Phe Gly
        115                 120                 125
Asn Ala Lys Thr Val Lys Asn Asp Asn Ser Ser Arg Phe Gly Lys Phe
    130                 135                 140
Ile Arg Ile Asn Phe Asp Val Thr Gly Tyr Ile Val Gly Ala Asn Ile
145                 150                 155                 160
Glu Thr Tyr Leu Leu Glu Lys Ser Arg Ala Ile Arg Gln Ala Arg Asp
                165                 170                 175
Glu Arg Thr Phe His Ile Phe Tyr Tyr Met Ile Ala Gly Ala Lys Glu
            180                 185                 190
Lys Met Arg Ser Asp Leu Leu Leu Glu Gly Phe Asn Asn Tyr Thr Phe
        195                 200                 205
Leu Ser Asn Gly Phe Val Pro Ile Pro Ala Ala Gln Asp Asp Glu Met
    210                 215                 220
Phe Gln Glu Thr Val Glu Ala Met Ala Ile Met Gly Phe Ser Glu Glu
225                 230                 235                 240
Glu Gln Leu Ser Ile Leu Lys Val Val Ser Ser Val Leu Gln Leu Gly
                245                 250                 255
Asn Ile Val Phe Lys Lys Glu Arg Asn Thr Asp Gln Ala Ser Met Pro
            260                 265                 270
Asp Asn Thr Ala Ala Gln Lys Val Cys His Leu Met Gly Ile Asn Val
        275                 280                 285
Thr Asp Phe Thr Arg Ser Ile Leu Thr Pro Arg Ile Lys Val Gly Arg
    290                 295                 300
Asp Val Val Gln Lys Ala Gln Thr Lys Glu Gln Ala Asp Phe Ala Val
305                 310                 315                 320
Glu Ala Leu Ala Lys Ala Thr Tyr Glu Arg Leu Phe Arg Trp Ile Leu
                325                 330                 335
```

```
Thr Arg Val Asn Lys Ala Leu Asp Lys Thr His Arg Gln Gly Ala Ser
            340                 345                 350
Phe Leu Gly Ile Leu Asp Ile Ala Gly Phe Glu Ile Phe Glu Val Asn
        355                 360                 365
Ser Phe Glu Gln Leu Cys Ile Asn Tyr Thr Asn Glu Lys Leu Gln Gln
    370                 375                 380
Leu Phe Asn His Thr Met Phe Ile Leu Glu Gln Glu Glu Tyr Gln Arg
385                 390                 395                 400
Glu Gly Ile Glu Trp Asn Phe Ile Asp Phe Gly Leu Asp Leu Gln Pro
                405                 410                 415
Cys Ile Glu Leu Ile Glu Arg Pro Asn Asn Pro Pro Gly Val Leu Ala
            420                 425                 430
Leu Leu Asp Glu Glu Cys Trp Phe Pro Lys Ala Thr Asp Lys Ser Phe
        435                 440                 445
Val Glu Lys Leu Cys Thr Glu Gln Gly Ser His Pro Lys Phe Gln Lys
    450                 455                 460
Pro Lys Gln Leu Lys Asp Lys Thr Glu Phe Ser Ile Ile His Tyr Ala
465                 470                 475                 480
Gly Lys Val Asp Tyr Asn Ala Ser Ala Trp Leu Thr Lys Asn Met Asp
                485                 490                 495
Pro Leu Asn Asp Asn Val Thr Ser Leu Leu Asn Ala Ser Ser Asp Lys
            500                 505                 510
Phe Val Ala Asp Leu Trp Lys Asp Val Asp Arg Ile Val Gly Leu Asp
        515                 520                 525
Gln Met Ala Lys Met Thr Glu Ser Ser Leu Pro Ser Ala Ser Lys Thr
    530                 535                 540
Lys Lys Gly Met Phe Arg Thr Val Gly Gln Leu Tyr Lys Glu Gln Leu
545                 550                 555                 560
Gly Lys Leu Met Thr Thr Leu Arg Asn Thr Thr Pro Asn Phe Val Arg
                565                 570                 575
Cys Ile Ile Pro Asn His Glu Lys Arg Ser Gly Lys Leu Asp Ala Phe
            580                 585                 590
Leu Val Leu Glu Gln Leu Arg Cys Asn Gly Val Leu Glu Gly Ile Arg
        595                 600                 605
Ile Cys Arg Gln Gly Phe Pro Asn Arg Ile Val Phe Gln Glu Phe Arg
    610                 615                 620
Gln Arg Tyr Glu Ile Leu Ala Ala Asn Ala Ile Pro Lys Gly Phe Met
625                 630                 635                 640
Asp Gly Lys Gln Ala Cys Ile Leu Met Ile Lys Ala Leu Glu Leu Asp
                645                 650                 655
Pro Asn Leu Tyr Arg Ile Gly Gln Ser Lys Ile Phe Phe Arg Thr Gly
            660                 665                 670
Val Leu Ala His Leu Glu Glu Glu Arg Asp Leu Lys Ile Thr Asp Val
        675                 680                 685
Ile Met Ala Phe Gln Ala Met Cys Arg Gly Tyr Leu Ala Arg Lys Ala
    690                 695                 700
Phe Ala Lys Arg Gln Gln Gln Leu Thr Ala Met Lys Val Ile Gln Arg
705                 710                 715                 720
Asn Cys Ala Ala Tyr Ile Lys Leu Arg Asn Trp Gln Trp Cys Arg Leu
                725                 730                 735
Phe Thr Lys Val Xaa Pro Leu Leu Gln Val Thr Arg Gln Glu Xaa Glu
            740                 745                 750
Met Gln Ala Lys Glu Asp Glu Leu Gln Lys Thr Lys Glu Arg Gln Gln
        755                 760                 765
Lys Ala Glu Asn Glu Leu Lys Glu Leu Glu Gln Lys His Ser Gln Leu
    770                 775                 780
Thr Glu Glu Lys Asn Leu Leu Gln Glu Gln Leu Gln Ala Glu Thr Glu
785                 790                 795                 800
Leu Tyr Ala Glu Ala Glu Glu Met Arg Val Arg Leu Ala Ala Lys Lys
                805                 810                 815
Gln Glu Leu Glu Glu Ile Leu His Glu Met Glu Ala Arg Leu Glu Glu
            820                 825                 830
Glu Glu Asp Arg Gly Gln Gln Leu Gln Ala Glu Arg Lys Lys Met Ala
        835                 840                 845
```

```
Gln Gln Met Leu Asp Leu Glu Glu Gln Leu Glu Glu Glu Glu Ala Ala
     850                 855                 860
Arg Gln Lys Leu Gln Leu Glu Lys Val Thr Ala Glu Ala Lys Ile Lys
865                 870                 875                 880
Lys Leu Glu Asp Glu Ile Leu Val Met Asp Asp Gln Asn Asn Lys Leu
                885                 890                 895
Ser Lys Glu Arg Lys Leu Leu Glu Glu Arg Ile Ser Asp Leu Thr Thr
            900                 905                 910
Asn Leu Ala Glu Glu Glu Glu Lys Ala Lys Asn Leu Thr Lys Leu Lys
        915                 920                 925
Asn Lys His Glu Ser Met Ile Ser Glu Leu Glu Val Arg Leu Lys Lys
    930                 935                 940
Glu Glu Lys Ser Arg Gln Glu Leu Glu Lys Leu Lys Arg Lys Leu Glu
945                 950                 955                 960
Gly Asp Ala Ser Asp Phe His Glu Gln Ile Ala Asp Leu Gln Ala Gln
                965                 970                 975
Ile Ala Glu Leu Lys Met Gln Leu Ala Lys Lys Glu Glu Glu Leu Gln
            980                 985                 990
Ala Ala Leu Ala Arg Leu Asp Asp Glu Ile Ala Gln Lys Asn Asn Ala
        995                1000                1005
Leu Lys Lys Ile Arg Glu Leu Glu Gly His Ile Ser Asp Leu Gln Glu
   1010                1015                1020
Asp Leu Asp Ser Glu Arg Ala Ala Arg Asn Lys Ala Glu Lys Gln Lys
1025                1030                1035                1040
Arg Asp Leu Gly Glu Glu Leu Glu Ala Leu Lys Thr Glu Leu Glu Asp
                1045                1050                1055
Thr Leu Asp Ser Thr Ala Thr Gln Gln Glu Leu Arg Ala Lys Arg Glu
            1060                1065                1070
Gln Glu Val Thr Val Leu Lys Arg Ala Leu Asn Glu Glu Thr Arg Ser
        1075                1080                1085
His Glu Ala Gln Val Gln Glu Met Arg Gln Lys His Ala Gln Ala Val
   1090                1095                1100
Gln Ser Leu Thr Glu Gln Leu Glu Gln Xaa Lys Arg Ala Lys Ala Asn
1105                1110                1115                1120
Leu Asp Lys Asn Lys Gln Thr Leu Glu Lys Glu Asn Thr Asp Leu Ala
                1125                1130                1135
Gly Glu Leu Arg Val Leu Gly Gln Ala Lys Gln Glu Val Glu His Arg
            1140                1145                1150
Met Lys Lys Leu Gln Ala Gln Val Gln Glu Leu Gln Ser Lys Cys Ser
        1155                1160                1165
Asp Gly Glu Arg Ala Arg Ala Glu Leu Asn Asp Lys Val His Lys Leu
   1170                1175                1180
Gln Asn Glu Val Glu Ser Val Thr Gly Met Leu Asn Glu Ala Glu Gly
1185                1190                1195                1200
Lys Ala Ile Lys Leu Ala Lys Asp Val Ala Ser Leu Ser Ser Gln Leu
                1205                1210                1215
Gln Asp Thr Gln Glu Leu Leu Gln Glu Glu Ser Arg Gln Lys Leu Asn
            1220                1225                1230
Val Ser Thr Ser Leu Arg Gln Leu Glu Glu Glu Arg Asn Ser Leu Gln
        1235                1240                1245
Asp Gln Leu Asp Glu Glu Met Glu Ala Lys Gln Asn Leu Glu Arg His
   1250                1255                1260
Ile Ser Thr Leu Asn Ile Gln Leu Ser Asp Ser Lys Lys Lys Leu Gln
1265                1270                1275                1280
Asp Phe Ala Ser Thr Val Glu Ala Leu Glu Glu Gly Lys Lys Arg Phe
                1285                1290                1295
Gln Lys Glu Ile Glu Asn Leu Thr Gln Gln Tyr Glu Glu Lys Ala Ala
            1300                1305                1310
Ala Tyr Asp Lys Leu Glu Lys Thr Lys Asn Arg Leu Gln Gln Glu Leu
        1315                1320                1325
Asp Asp Leu Val Val Asp Leu Asp Asn Gln Arg Gln Leu Val Ser Asn
   1330                1335                1340
Leu Glu Lys Lys Gln Arg Lys Phe Asp Gln Leu Leu Ala Glu Glu Lys
1345                1350                1355                1360
```

Asn Ile Ser Ser Lys Tyr Ala Asp Glu Arg Asp Arg Val Glu Ala Glu
1365 1370 1375
Ala Arg Glu Lys Glu Thr Lys Ala Leu Ser Leu Ala Arg Ala Leu Glu
1380 1385 1390
Glu Ala Leu Glu Ala Lys Glu Glu Leu Glu Arg Thr Asn Lys Met Leu
1395 1400 1405
Lys Ala Glu Met Gly Arg Pro Gly Ser Ala Ser Lys Asp Asp Val Gly
1410 1415 1420
Gln Glu Leu Ser His Asp Leu Glu Lys Ser Lys Arg Ala Leu Gly Asp
1425 1430 1435 1440
Pro Arg Leu Glu Glu Met Lys Thr Gln Leu Glu Glu Leu Gly Arg Thr
1445 1450 1455
Glu Leu Ala Ser Pro Arg Arg Asp Ala Lys Leu Arg Leu Glu Val Asn
1460 1465 1470
Met Gln Ala Pro Ser Arg Ala Ser Phe Glu Arg Asp Leu Gln Ala Arg
1475 1480 1485
Thr Glu Gln Asn Glu Glu Ser Arg Arg His Leu Gln Arg Gln Leu His
1490 1495 1500
Glu Tyr Glu Thr Glu Leu Glu Asp Glu Arg Lys Gln Arg Ala Leu Ala
1505 1510 1515 1520
Ala Ala Ala Lys Ile Lys Leu Gly Trp Asp Pro Val Arg Thr Leu Asp
1525 1530 1535
Leu Xaa Ala Asp Ser Ala Ile Lys Gly Arg Gly Gly Lys Ala Ile Lys
1540 1545 1550
Gln Leu Arg Lys Leu Gln Ala Gln Met Lys Asp Phe Gln Arg Glu Leu
1555 1560 1565
Glu Asp Ala Arg Ala Ser Arg Asp Glu Ile Phe Ala Thr Ala Lys Glu
1570 1575 1580
Asn Glu Lys Lys Ala Lys Ser Leu Glu Ala Asp Leu Met Gln Leu Gln
1585 1590 1595 1600
Glu Asp Leu Ala Ala Ala Glu Glu Gly Arg Lys Gln Ala Asp Leu Glu
1605 1610 1615
Lys Glu Glu Leu Ala Glu Glu Leu Ala Ser Ser Leu Ser Gly Arg Asn
1620 1625 1630
Ala Leu Gln Asp Glu Lys Arg Arg Leu Glu Ala Arg Ile Ala Gln Leu
1635 1640 1645
Glu Glu Glu Leu Glu Glu Glu Gln Gly Asn Met Glu Ala Met Ser Asp
1650 1655 1660
Arg Val Arg Lys Ala Thr Gln Gln Ala Glu Gln Leu Ser Asn Glu Leu
1665 1670 1675 1680
Ala Thr Glu Arg Ser Thr Ala Gln Lys Asn Glu Ser Ala Arg Gln Gln
1685 1690 1695
Leu Glu Arg Gln Asn Lys Glu Leu Arg Ser Lys Leu His Glu Met Glu
1700 1705 1710
Gly Ala Val Lys Ser Lys Phe Lys Ser Thr Ile Ala Ala Leu Glu Ala
1715 1720 1725
Lys Ile Ala Gln Leu Glu Glu Gln Val Glu Gln Glu Ala Arg Glu Lys
1730 1735 1740
Gln Ala Ala Thr Lys Ser Leu Lys Gln Lys Asp Lys Lys Leu Lys Glu
1745 1750 1755 1760
Ile Leu Leu Gln Val Glu Asp Glu Arg Lys Met Ala Glu Gln Tyr Lys
1765 1770 1775
Glu Gln Ala Glu Lys Gly Asn Ala Arg Val Lys Gln Leu Lys Arg Gln
1780 1785 1790
Leu Glu Glu Ala Glu Glu Glu Ser Gln Arg Ile Asn Ala Asn Arg Arg
1795 1800 1805
Lys Leu Gln Arg Glu Leu Asp Glu Ala Thr Glu Ser Asn Glu Ala Met
1810 1815 1820
Gly Arg Glu Val Asn Ala Leu Lys Ser Lys Leu Arg Arg Gly Asn Glu
1825 1830 1835 1840
Thr Ser Phe Val Pro Ser Arg Arg Ser Gly Gly Arg Arg Val Ile Glu
1845 1850 1855
Asn Ala Asp Gly Ser Glu Glu Glu Thr Asp Thr Arg Asp Ala Asp Phe
1860 1865 1870

```
Asn Gly Thr Lys Ala Ser Glu
       1875            1879


     <210> 1266
     <211> 257
     <212>Amino acid
     <213> Homo sapiens



     <400> 1266
Lys Leu His Phe Ala Lys Ser Leu Asn Ser Glu Leu Ser Cys Ser Thr
  1               5                  10                  15
Arg Glu Ala Met Gln Asp Glu Asp Gly Tyr Ile Thr Leu Asn Ile Lys
            20                  25                  30
Thr Arg Lys Pro Ala Leu Val Ser Val Gly Pro Ala Ser Ser Ser Trp
        35                  40                  45
Trp Arg Val Met Ala Leu Ile Leu Leu Ile Leu Cys Val Gly Met Val
    50                  55                  60
Val Gly Leu Val Ala Leu Gly Ile Trp Ser Val Met Gln Arg Asn Tyr
65                  70                  75                  80
Leu Gln Asp Glu Asn Glu Asn Arg Thr Gly Thr Leu Gln Gln Leu Ala
                85                  90                  95
Lys Arg Phe Cys Gln Tyr Val Val Lys Gln Ser Glu Leu Lys Gly Thr
            100                 105                 110
Phe Lys Gly His Lys Cys Ser Pro Cys Asp Thr Asn Trp Arg Tyr Tyr
        115                 120                 125
Gly Asp Ser Cys Tyr Gly Phe Phe Arg His Asn Leu Thr Trp Glu Glu
    130                 135                 140
Ser Lys Gln Tyr Cys Thr Asp Met Asn Ala Thr Leu Leu Lys Ile Asp
145                 150                 155                 160
Asn Arg Asn Ile Val Glu Tyr Ile Lys Ala Arg Thr His Leu Ile Arg
                165                 170                 175
Trp Val Gly Leu Ser Arg Gln Lys Ser Asn Glu Val Trp Lys Trp Glu
            180                 185                 190
Asp Gly Ser Val Ile Ser Glu Asn Met Phe Glu Phe Leu Glu Asp Gly
        195                 200                 205
Lys Gly Asn Met Asn Cys Ala Tyr Phe His Asn Gly Lys Met His Pro
    210                 215                 220
Thr Phe Cys Glu Asn Lys His Tyr Leu Met Cys Glu Arg Lys Ala Gly
225                 230                 235                 240
His Asp Pro Arg Trp Thr Gln Leu Pro Leu Met Pro Lys Arg Trp Thr
                245                 250                 255
Gly
257


     <210> 1267
     <211> 208
     <212>Amino acid
     <213> Homo sapiens



     <400> 1267
Asn Gln Gly Leu Arg Asp Val Gly Leu Cys Arg Thr Cys Leu Val Asn
  1               5                  10                  15
Lys Ile Phe Ala Ser Ser Ile Leu Gly Lys Ser His His His Ser Leu
            20                  25                  30
```

```
Val Ser Ile Asn Gln Gly His Asn Ala Pro Trp Lys Ala Ala Gly Ser
          35                  40                  45
Leu Pro Leu Lys Ala Ala Tyr Cys Gln Gly Phe Ser Pro Cys Asp Cys
      50                  55                  60
Leu Lys Tyr Gly Ser Trp Asp Glu Lys Asp Leu Met Val Pro Gln Pro
 65                  70                  75                  80
Asp Thr His Lys Gly Ser Val Leu Arg Trp Ile Ser Lys Arg Gly Lys
                 85                  90                  95
Pro Leu Ala Val Glu Met Glu Glu Gly His Cys Leu Cys Leu Pro Leu
            100                 105                 110
Gly Thr Glu Cys Leu Gly Val Lys Pro Ile Val His Leu Phe Asn Ser
        115                 120                 125
Glu Met Gly Glu Lys Arg Pro Val Ala Gly Ala Arg His Val Gly Ser
    130                 135                 140
Ser Ala Ala Leu Leu Phe Phe Thr Pro Leu Arg Cys Leu Gly Gly Glu
145                 150                 155                 160
Lys His Lys Ser Gly Leu Arg Ala Arg Pro Gly Ile Val Pro Ser Leu
                165                 170                 175
Glu Leu Asn Tyr Asp Ile Asp Ser Phe Ala His Met Phe Phe Ser Val
            180                 185                 190
Asp Leu Leu Leu Ile Ile Thr Leu Leu Ser Tyr Tyr Ile Pro Phe Cys
        195                 200                 205         208
```

<210> 1268
<211> 158
<212>Amino acid
<213> Homo sapiens

<400> 1268

```
Met Trp Trp Arg Leu Ala Pro Thr Gln Ala Ile Trp Arg Ala Ala Gly
  1               5                  10                  15
Cys Cys Met Arg Phe Ser Arg Arg Arg Ser Thr Cys Cys Cys Leu Ala
             20                  25                  30
Ser Cys Ile Phe Leu Leu Tyr Lys Ile Val Arg Gly Asp Gln Pro Ala
         35                  40                  45
Ala Lys Arg Arg Gln Arg Arg Arg Arg Ala Ala Pro Ser Ala Pro Pro
     50                  55                  60
Gln Ala Ala Arg Leu His Pro Pro Pro Lys Leu Arg Arg Phe Asp Gly
 65                  70                  75                  80
Val Gln Asp Pro Ala Pro Tyr Ser Trp Ala Ile Asn Gly Lys Val Phe
                 85                  90                  95
Asp Val Thr Gln Arg Pro Ala Asn Phe Leu Arg Gly Pro Arg Gly Pro
            100                 105                 110
Glu Thr Leu Ser Asp Trp Glu Ser Gln Phe Thr Phe Lys Tyr His His
        115                 120                 125
Val Gly Lys Leu Leu Lys Glu Gly Glu Glu Pro Thr Val Tyr Ser Asp
    130                 135                 140
Glu Glu Glu Pro Lys Asp Glu Ser Ala Arg Lys Asn Asp  *
145                 150                 155     157
```

<210> 1269
<211> 178
<212>Amino acid
<213> Homo sapiens

<400> 1269
Gly Pro Arg Met Ala Lys Phe Leu Ser Gln Asp Gln Ile Asn Glu Tyr
1 5 10 15
Lys Glu Cys Phe Ser Leu Tyr Asp Lys Gln Gln Arg Gly Lys Ile Lys
20 25 30
Ala Thr Asp Leu Met Val Ala Met Arg Cys Leu Gly Ala Ser Pro Thr
35 40 45
Pro Gly Glu Val Gln Arg His Leu Gln Thr His Gly Ile Asp Gly Asn
50 55 60
Gly Glu Leu Asp Phe Ser Thr Phe Leu Thr Ile Met His Met Gln Ile
65 70 75 80
Lys Gln Glu Asp Pro Lys Lys Glu Ile Leu Leu Ala Met Leu Met Val
85 90 95
Asp Lys Glu Lys Lys Gly Tyr Val Met Ala Ser Asp Leu Arg Ser Lys
100 105 110
Leu Thr Ser Leu Gly Glu Lys Leu Thr His Lys Glu Val Asp Asp Leu
115 120 125
Phe Arg Glu Ala Asp Ile Glu Pro Asn Gly Lys Val Lys Tyr Asp Glu
130 135 140
Phe Ile His Lys Ile Thr Leu Leu Pro Gly Arg Asp Leu Leu Lys Glu
145 150 155 160
Glu Asn Gly Arg Ala Ser Pro Gly Pro Glu Asn Leu Glu Gln Leu Ile
165 170 175
Phe Leu
178

<210> 1270
<211> 457
<212>Amino acid
<213> Homo sapiens

<400> 1270
Ala Asp Pro His Thr Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala
1 5 10 15
Thr Lys Arg Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr
20 25 30
Trp Asn Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu
35 40 45
Pro Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu
50 55 60
Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln
65 70 75 80
Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala
85 90 95
His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg
100 105 110
Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly
115 120 125
Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro
130 135 140
Glu Ser Arg Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu
145 150 155 160
Lys Ala Gln Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln
165 170 175
Gln Gln Arg His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln
180 185 190

```
Ser Gln Phe Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala
        195                 200                 205
Lys Pro Ala Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp
    210                 215                 220
Pro Ala His Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln
225                 230                 235                 240
Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln
                245                 250                 255
Pro Gln Gly Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp
            260                 265                 270
Gly Gly Trp Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe
        275                 280                 285
Asn Arg Pro Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly
    290                 295                 300
Glu Phe Trp Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg
305                 310                 315                 320
Asn Ser Arg Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu
                325                 330                 335
Leu Leu Gln Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser
            340                 345                 350
Leu Gln Leu Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val
        355                 360                 365
Pro Pro Ser Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His
    370                 375                 380
Asp Leu Arg Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp
385                 390                 395                 400
Trp Phe Gly Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg
                405                 410                 415
Ser Ile Pro Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys
            420                 425                 430
Thr Trp Arg Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile
        435                 440                 445
Gln Pro Met Ala Ala Glu Ala Ala Ser
    450                 455     457
```

<210> 1271
<211> 394
<212>Amino acid
<213> Homo sapiens

<400> 1271

```
Ala Leu Asp Phe Gly Asp Ser Cys Gln Trp Pro Arg Pro Gln Asp Thr
  1               5                  10                  15
Met Lys Gln Leu Pro Val Leu Glu Pro Gly Asp Lys Pro Arg Lys Ala
            20                  25                  30
Thr Trp Tyr Thr Leu Thr Val Pro Gly Asp Ser Pro Cys Ala Arg Val
        35                  40                  45
Gly His Ser Cys Ser Tyr Leu Pro Pro Val Gly Asn Ala Lys Arg Gly
    50                  55                  60
Lys Val Phe Ile Val Gly Gly Ala Asn Pro Asn Arg Ser Phe Ser Asp
65                  70                  75                  80
Val His Thr Met Asp Leu Gly Lys His Gln Trp Asp Leu Asp Thr Cys
                85                  90                  95
Lys Gly Leu Leu Pro Arg Tyr Glu His Ala Ser Phe Ile Pro Ser Cys
            100                 105                 110
Thr Pro Asp Arg Ile Trp Val Phe Gly Gly Ala Asn Gln Ser Gly Asn
        115                 120                 125
Arg Asn Cys Leu Gln Val Leu Asn Pro Glu Thr Arg Thr Trp Thr Thr
    130                 135                 140
```

```
Pro Glu Val Thr Ser Pro Pro Pro Ser Pro Arg Thr Phe His Thr Ser
145                 150                 155                 160
Ser Ala Ala Ile Gly Asn Gln Leu Tyr Val Phe Gly Gly Gly Glu Arg
                165                 170                 175
Gly Ala Gln Pro Val Gln Asp Thr Lys Leu His Val Phe Asp Ala Asn
            180                 185                 190
Thr Leu Thr Trp Ser Gln Pro Glu Thr Leu Gly Asn Pro Pro Ser Pro
        195                 200                 205
Arg His Gly His Val Met Val Ala Ala Gly Thr Lys Leu Phe Ile His
    210                 215                 220
Gly Gly Leu Ala Gly Asp Arg Phe Tyr Asp Asp Leu His Cys Ile Asp
225                 230                 235                 240
Ile Ser Asp Met Lys Trp Gln Lys Leu Asn Pro Thr Gly Ala Ala Pro
                245                 250                 255
Ala Gly Cys Ala Ser His Thr Pro Ala Val Ala Met Gly Lys His Val
            260                 265                 270
Tyr Ile Phe Gly Gly Met Thr Pro Ala Gly Ala Pro Gly Thr Gln Cys
        275                 280                 285
Thr Gln Tyr His Thr Glu Glu Gln His Trp Asp Pro Cys Leu Lys Phe
    290                 295                 300
Asp Thr Pro Ser Tyr Pro Pro Gly Thr Ile Gly Thr His Ser His Val
305                 310                 315                 320
Val Ser Phe Pro Trp Pro Val Thr Cys Ala Ser Glu Lys Glu Asp Ser
                325                 330                 335
Asn Ser Leu Thr Leu Asn His Glu Ala Glu Lys Glu Asp Ser Ala Asp
            340                 345                 350
Lys Val Met Ser His Ser Gly Asp Ser His Glu Glu Ser Gln Thr Ala
        355                 360                 365
Thr Leu Leu Cys Leu Val Phe Gly Gly Met Asn Thr Glu Gly Glu Ile
    370                 375                 380
Tyr Asp Asp Cys Ile Val Thr Val Val Asp
385                 390                 394
```

<210> 1272
<211> 176
<212>Amino acid
<213> Homo sapiens

<400> 1272

```
Gly Phe Ser Ile Gly Lys Ala Thr Asp Arg Met Asp Ala Phe Arg Lys
  1               5                  10                  15
Ala Lys Asn Arg Ala Val His His Leu His Tyr Ile Glu Arg Tyr Glu
             20                  25                  30
Asp His Thr Ile Phe His Asp Ile Ser Leu Arg Phe Lys Arg Thr His
         35                  40                  45
Ile Lys Met Lys Lys Gln Pro Lys Gly Tyr Gly Leu Arg Cys His Arg
     50                  55                  60
Ala Ile Ile Thr Ile Cys Arg Leu Ile Gly Ile Lys Asp Met Tyr Ala
 65                  70                  75                  80
Lys Val Ser Gly Ser Ile Asn Met Leu Ser Leu Thr Gln Gly Leu Phe
                 85                  90                  95
Arg Gly Leu Ser Arg Gln Glu Thr His Gln Gln Leu Ala Asp Lys Lys
            100                 105                 110
Gly Leu His Val Val Glu Ile Arg Glu Glu Cys Gly Pro Leu Pro Ile
        115                 120                 125
Val Val Ala Ser Pro Arg Gly Pro Leu Arg Lys Asp Pro Glu Pro Glu
    130                 135                 140
Asp Glu Val Pro Asp Val Lys Leu Asp Trp Glu Asp Val Lys Thr Ala
145                 150                 155                 160
```

```
Gln Gly Met Lys Arg Ser Val Trp Ser Asn Leu Lys Arg Ala Ala Thr
                165                 170                 175 176
```

<210> 1273
<211> 457
<212>Amino acid
<213> Homo sapiens

<400> 1273

```
Ala Asp Pro His Thr Thr Val Ile Arg Phe Phe Pro Ala Ala Ser Ala
  1               5                  10                  15
Thr Lys Arg Val Leu Pro Pro Val Leu Arg Val Ser Ser Pro Arg Thr
            20                  25                  30
Trp Asn Pro Asn Val Pro Glu Ser Pro Arg Ile Pro Ala Pro Arg Leu
        35                  40                  45
Pro Lys Arg Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu
    50                  55                  60
Cys Ala Ala Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln
65                  70                  75                  80
Ser Lys Ser Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala
                85                  90                  95
His Gly Leu Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg
            100                 105                 110
Thr Arg Ser Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly
        115                 120                 125
Ser Ala Cys Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro
    130                 135                 140
Glu Ser Arg Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu
145                 150                 155                 160
Lys Ala Gln Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln
                165                 170                 175
Gln Gln Arg His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln
            180                 185                 190
Ser Gln Phe Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala
        195                 200                 205
Lys Pro Ala Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp
    210                 215                 220
Pro Ala His Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln
225                 230                 235                 240
Glu Leu Phe Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln
                245                 250                 255
Pro Gln Gly Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp
            260                 265                 270
Gly Gly Trp Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe
        275                 280                 285
Asn Arg Pro Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly
    290                 295                 300
Glu Phe Trp Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg
305                 310                 315                 320
Asn Ser Arg Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu
                325                 330                 335
Leu Leu Gln Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser
            340                 345                 350
Leu Gln Leu Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val
        355                 360                 365
Pro Pro Ser Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His
    370                 375                 380
```

```
Asp Leu Arg Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp
385                 390                 395                 400
Trp Phe Gly Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg
                405                 410                 415
Ser Ile Pro Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys
            420                 425                 430
Thr Trp Arg Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile
        435                 440                 445
Gln Pro Met Ala Ala Glu Ala Ala Ser
    450                 455     457
```

<210> 1274
<211> 359
<212>Amino acid
<213> Homo sapiens

<400> 1274

```
Thr Leu Arg Ser Arg Pro Ala Gly Glu Ala Gly Tyr Leu Gly Trp Asp
  1               5                  10                  15
Pro Glu Gln Ala Gly Glu Gly Ser Ala Leu Ser Arg Pro Gly Ala Met
            20                  25                  30
Ala Ala Leu Met Thr Pro Gly Thr Gly Ala Pro Pro Ala Pro Gly Asp
        35                  40                  45
Phe Ser Gly Glu Gly Ser Gln Gly Leu Pro Asp Pro Ser Pro Glu Pro
    50                  55                  60
Lys Gln Leu Pro Glu Leu Ile Arg Met Lys Arg Asp Gly Gly Arg Leu
65                  70                  75                  80
Ser Glu Ala Asp Ile Arg Gly Phe Val Ala Ala Val Val Asn Gly Ser
                85                  90                  95
Ala Gln Gly Ala Gln Ile Gly Ala Trp Gly Gly Leu Gly Val Pro Asp
            100                 105                 110
Pro Asp Trp Glu Val Ser Pro Arg Asp Phe Gly Ser Leu Gly Val Arg
        115                 120                 125
Arg Cys Pro Thr Thr Ser Thr Gly Pro Arg Val Pro His Arg Cys Gly
    130                 135                 140
Leu Pro Pro Ser Arg Val Pro Pro His Thr Arg Gly Met Leu Met Ala
145                 150                 155                 160
Ile Arg Leu Arg Gly Met Asp Leu Glu Glu Thr Ser Val Leu Thr Gln
                165                 170                 175
Ala Leu Ala Gln Ser Gly Gln Gln Leu Glu Trp Pro Glu Ala Trp Arg
            180                 185                 190
Gln Gln Leu Val Asp Lys His Ser Thr Gly Gly Val Gly Asp Lys Val
        195                 200                 205
Ser Leu Val Leu Ala Pro Ala Leu Ala Ala Cys Gly Cys Lys Val Ile
    210                 215                 220
Asn His Leu Leu Ser Arg Arg Glu Pro Ile Pro His Met Gln Gln Pro
225                 230                 235                 240
Val His Pro Gln Ala Ala Pro Asn Leu Lys Pro Gly Pro Lys Pro Pro
                245                 250                 255
Arg Pro Tyr Gln Gly Phe Ser Pro Pro Cys Ser Pro Ala Gln Phe Ser
            260                 265                 270
Pro Pro Arg Ser Pro Ala Gln Arg Leu Gly Pro Leu Trp Leu Gln Thr
        275                 280                 285
Arg Pro Leu Gly Ala Gly Lys Arg Ser Thr Asp Gly Ile Gln Thr Pro
    290                 295                 300
Phe Pro Leu Gly Pro Gln Thr Ala Pro Pro Arg Glu Glu Leu Arg Thr
305                 310                 315                 320
Ser Leu Pro Leu Pro Gln Ala Leu Phe Pro Gln Gly Gln Val Pro Thr
                325                 330                 335
```

```
Ser Ser Pro Thr Asp Thr Ser Gln Pro Arg Lys Leu Pro Phe His Ser
            340                 345                 350
Leu Thr Ser Trp Ala Pro Leu
        355             359
```

<210> 1275
<211> 146
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(146)
<223> X = any amino acid or stop code

<400> 1275

```
Arg Ala Leu Arg Glu Leu Arg Glu Arg Val Thr His Gly Leu Ala Glu
  1               5                  10                  15
Ala Gly Arg Asp Arg Glu Asp Val Ser Thr Glu Leu Tyr Arg Ala Leu
             20                  25                  30
Glu Ala Val Arg Leu Gln Asn Ser Glu Gly Ser Cys Glu Pro Cys Pro
         35                  40                  45
Thr Ser Trp Leu Pro Phe Gly Gly Ser Cys Tyr Tyr Phe Ser Val Pro
     50                  55                  60
Lys Thr Thr Trp Ala Glu Ala Gln Gly His Cys Ala Asp Ala Ser Ala
 65                  70                  75                  80
His Leu Ala Ile Val Gly Gly Leu Gly Glu Gln Asp Phe Leu Ser Arg
                 85                  90                  95
Asp Thr Ser Ala Leu Glu Tyr Trp Ile Gly Arg Arg Ala Val Gln His
            100                 105                 110
Leu Arg Lys Val Gln Gly Tyr Ser Trp Val Asp Gly Val Pro Leu Ser
        115                 120                 125
Phe Arg Xaa Trp Glu Gly His Pro Gly Glu Thr Trp Gly Pro Gln Val
    130                 135                 140
Arg Leu
145 146
```

<210> 1276
<211> 187
<212>Amino acid
<213> Homo sapiens

<400> 1276

```
Arg Trp Pro Arg Ser Trp Pro Pro Arg Ala Gly Ala Ala Arg Gly Ala
  1               5                  10                  15
Ala Glu Ala Ala Met Val Gly Ala Leu Cys Gly Cys Trp Phe Arg Leu
             20                  25                  30
Gly Gly Ala Arg Pro Leu Ile Pro Leu Gly Pro Thr Val Val Gln Thr
         35                  40                  45
Ser Met Ser Arg Ser Gln Val Ala Leu Leu Gly Leu Ser Leu Leu Leu
     50                  55                  60
Met Leu Leu Leu Tyr Val Gly Leu Pro Gly Pro Pro Glu Gln Thr Ser
 65                  70                  75                  80
Cys Leu Trp Gly Asp Pro Asn Val Thr Val Leu Ala Gly Leu Thr Pro
```

```
                85                  90                  95
Gly Asn Ser Pro Ile Phe Tyr Arg Glu Val Leu Pro Leu Asn Gln Ala
            100                 105                 110
His Arg Val Glu Val Cys Cys Phe Met Glu Arg Pro Leu Thr Leu Thr
        115                 120                 125
Arg Gly Ser Ser Trp Ala His Cys Ser Tyr Cys His Arg Gly Ala Thr
    130                 135                 140
Gly Pro Trp Pro Leu Thr Phe Gln Val Leu Gly Thr Arg His Leu Gln
145                 150                 155                 160
Arg Arg Gln Ala Gln Arg Gln Gly Gly Gln Arg Cys Trp Ser Gly Arg
                165                 170                 175
Cys Gly Thr Trp Arg Tyr Arg Met Pro Cys Trp
            180                 185     187
```

<210> 1277
<211> 481
<212>Amino acid
<213> Homo sapiens

<400> 1277

```
Gln Glu Asn Gln Leu Glu Lys Lys Met Lys Phe Leu Ile Phe Ala Phe
  1               5                  10                  15
Phe Gly Gly Val His Leu Leu Ser Leu Cys Ser Gly Lys Ala Ile Cys
             20                  25                  30
Lys Asn Gly Ile Ser Lys Arg Thr Phe Glu Glu Ile Lys Glu Glu Ile
         35                  40                  45
Ala Ser Cys Gly Asp Val Ala Lys Ala Ile Ile Asn Leu Ala Val Tyr
     50                  55                  60
Gly Lys Ala Gln Asn Arg Ser Tyr Glu Arg Leu Ala Leu Leu Val Asp
 65                  70                  75                  80
Thr Val Gly Pro Arg Leu Ser Gly Ser Lys Asn Leu Glu Lys Ala Ile
                85                  90                  95
Gln Ile Met Tyr Gln Asn Leu Gln Gln Asp Gly Leu Glu Lys Val His
            100                 105                 110
Leu Glu Pro Val Arg Ile Pro His Trp Glu Arg Gly Glu Glu Ser Ala
        115                 120                 125
Val Met Leu Glu Pro Arg Ile His Lys Ile Ala Ile Leu Gly Leu Gly
    130                 135                 140
Ser Ser Ile Gly Thr Pro Pro Glu Gly Ile Thr Ala Glu Val Leu Val
145                 150                 155                 160
Val Thr Ser Phe Asp Glu Leu Gln Arg Arg Ala Ser Glu Ala Arg Gly
                165                 170                 175
Lys Ile Val Val Tyr Asn Gln Pro Tyr Ile Asn Tyr Ser Arg Thr Val
            180                 185                 190
Gln Tyr Arg Thr Gln Gly Ala Val Glu Ala Ala Lys Val Gly Ala Leu
        195                 200                 205
Ala Ser Leu Ile Arg Ser Val Ala Ser Phe Ser Ile Tyr Ser Pro His
    210                 215                 220
Thr Gly Ile Gln Glu Tyr Gln Asp Gly Val Pro Lys Ile Pro Thr Ala
225                 230                 235                 240
Cys Ile Thr Val Glu Asp Ala Glu Met Met Ser Arg Met Ala Ser His
                245                 250                 255
Gly Ile Lys Ile Val Ile Gln Leu Lys Met Gly Ala Lys Thr Tyr Pro
            260                 265                 270
Asp Thr Asp Ser Phe Asn Thr Val Ala Glu Ile Thr Gly Ser Lys Tyr
        275                 280                 285
Pro Glu Gln Val Val Leu Val Ser Gly His Leu Asp Ser Trp Asp Val
    290                 295                 300
Gly Gln Gly Ala Met Asp Asp Gly Gly Gly Ala Phe Ile Ser Trp Glu
```

```
305                 310                 315                 320
Ala Leu Ser Leu Ile Lys Asp Leu Gly Leu Arg Pro Lys Arg Thr Leu
                325                 330                 335
Arg Leu Val Leu Trp Thr Ala Glu Glu Gln Gly Gly Val Gly Ala Phe
            340                 345                 350
Gln Tyr Tyr Gln Leu His Lys Val Asn Ile Ser Asn Tyr Ser Leu Val
        355                 360                 365
Met Glu Ser Asp Ala Gly Thr Phe Leu Pro Thr Gly Leu Gln Phe Thr
    370                 375                 380
Gly Ser Glu Lys Ala Arg Ala Ile Met Glu Glu Val Met Ser Leu Leu
385                 390                 395                 400
Gln Pro Leu Asn Ile Thr Gln Val Leu Ser His Gly Glu Gly Thr Asp
                405                 410                 415
Ile Asn Phe Trp Ile Gln Ala Gly Val Pro Gly Ala Ser Leu Leu Asp
            420                 425                 430
Asp Leu Tyr Lys Tyr Phe Phe Phe His His Ser His Gly Asp Thr Met
        435                 440                 445
Thr Val His Gly Ile Gln Thr Gln Met Asn Val Ala Ala Ala Val Trp
    450                 455                 460
Ala Val Val Ser Tyr Val Val Ala Asp Met Glu Glu Met Leu Pro Arg
465                 470                 475                 480
Ser
481
```

<210> 1278
<211> 428
<212>Amino acid
<213> Homo sapiens

<400> 1278

```
Thr Lys Pro Arg Lys Arg Arg His Gln Pro Ala Ser Gln Arg Gln Arg
  1               5                  10                  15
Pro Trp Ser Ser Asp Ser Thr Gly Asp Leu Leu Ala Arg Gly Lys Gly
            20                  25                  30
Arg Lys Glu Glu Asn Lys Gly Ser Asp Arg Val Ser Leu Ala Pro Pro
        35                  40                  45
Ser Leu Arg Arg Pro Met Met Cys Gln Ser Glu Ala Arg Gln Gly Pro
    50                  55                  60
Glu Leu Arg Ala Ala Lys Trp Leu His Phe Pro Gln Leu Ala Leu Arg
65                  70                  75                  80
Arg Arg Leu Gly Gln Leu Ser Cys Met Ser Arg Pro Ala Leu Lys Leu
                85                  90                  95
Arg Ser Trp Pro Leu Thr Val Leu Tyr Tyr Leu Leu Pro Phe Gly Ala
            100                 105                 110
Leu Arg Pro Leu Ser Arg Val Gly Trp Arg Pro Val Ser Arg Val Ala
        115                 120                 125
Leu Tyr Lys Ser Val Pro Thr Arg Leu Leu Ser Arg Ala Trp Gly Arg
    130                 135                 140
Leu Asn Gln Val Glu Leu Pro His Trp Leu Arg Arg Pro Val Tyr Ser
145                 150                 155                 160
Leu Tyr Ile Trp Thr Phe Gly Val Asn Met Lys Glu Ala Ala Val Glu
                165                 170                 175
Asp Leu His His Tyr Arg Asn Leu Ser Glu Phe Phe Arg Arg Lys Leu
            180                 185                 190
Lys Pro Gln Ala Arg Pro Val Cys Gly Leu His Ser Val Ile Ser Pro
        195                 200                 205
Ser Asp Gly Arg Ile Leu Asn Phe Gly Gln Val Lys Asn Cys Glu Val
    210                 215                 220
Glu Gln Val Lys Gly Val Thr Tyr Ser Leu Glu Ser Phe Leu Gly Pro
```

```
225                 230                 235                 240
Arg Met Cys Thr Glu Asp Leu Pro Phe Pro Pro Ala Ala Ser Cys Asp
                245                 250                 255
Ser Phe Lys Asn Gln Leu Val Thr Arg Glu Gly Asn Glu Leu Tyr His
            260                 265                 270
Cys Val Ile Tyr Leu Ala Pro Gly Asp Tyr His Cys Phe His Ser Pro
        275                 280                 285
Thr Asp Trp Thr Val Ser His Arg Arg His Phe Pro Gly Ser Leu Met
    290                 295                 300
Ser Val Asn Pro Gly Met Ala Arg Trp Ile Lys Glu Leu Phe Cys His
305                 310                 315                 320
Asn Glu Arg Val Val Leu Thr Gly Asp Trp Lys His Gly Phe Phe Ser
                325                 330                 335
Leu Thr Ala Val Gly Ala Thr Asn Trp Gly Ser Ile Arg Ile Tyr Phe
            340                 345                 350
Asp Arg Asp Leu His Thr Asn Ser Pro Arg His Ser Lys Gly Ser Tyr
        355                 360                 365
Asn Asp Phe Ser Phe Val Thr His Thr Asn Arg Glu Gly Val Pro Met
    370                 375                 380
Arg Lys Gly Glu His Leu Gly Glu Phe Asn Leu Gly Ser Thr Ile Val
385                 390                 395                 400
Leu Ile Phe Glu Ala Pro Lys Asp Phe Asn Phe Gln Leu Lys Thr Gly
                405                 410                 415
Gln Lys Ile Arg Phe Gly Glu Ala Leu Gly Ser Leu
            420                 425         428
```

<210> 1279
<211> 633
<212>Amino acid
<213> Homo sapiens

<400> 1279

```
Leu Pro Glu Arg Ala Phe Gly Pro Arg Thr Pro Arg Ala Pro Arg Arg
  1               5                  10                  15
Arg Arg Arg Arg Leu Leu Leu Ser Pro Pro Pro Arg Pro Pro Pro Pro
             20                  25                  30
Leu Asp Arg Glu Pro Arg Ala Pro Gly Pro Trp Leu Cys Pro Ser Arg
         35                  40                  45
Ala Gly Thr Ala Gln Asp Pro Ala Arg Ile Arg Glu Arg Arg Gly Arg
     50                  55                  60
Val Ala Gly Gly Ala Ala Gly Pro Ala Met Glu Leu Arg Ala Arg Gly
 65                  70                  75                  80
Trp Trp Leu Leu Cys Ala Ala Ala Ala Leu Val Ala Cys Ala Arg Gly
                 85                  90                  95
Asp Pro Ala Ser Lys Ser Arg Ser Cys Gly Glu Val Arg Gln Ile Tyr
            100                 105                 110
Gly Ala Lys Gly Phe Ser Ser Ser Asp Val Pro Gln Ala Glu Ile Ser
        115                 120                 125
Gly Glu His Leu Arg Ile Cys Pro Gln Gly Tyr Thr Cys Cys Thr Ser
    130                 135                 140
Glu Met Glu Glu Asn Leu Ala Asn Arg Ser His Ala Glu Leu Glu Thr
145                 150                 155                 160
Ala Leu Arg Asp Ser Ser Arg Val Leu Gln Ala Met Leu Ala Thr Gln
                165                 170                 175
Leu Arg Ser Phe Asp Asp His Phe Gln His Leu Leu Asn Asp Ser Glu
            180                 185                 190
Arg Thr Leu Gln Ala Thr Phe Pro Gly Ala Phe Gly Glu Leu Tyr Thr
        195                 200                 205
Gln Asn Ala Arg Ala Phe Arg Asp Leu Tyr Ser Glu Leu Arg Leu Tyr
```

```
    210                 215                 220
Tyr Arg Gly Ala Asn Leu His Leu Glu Glu Thr Leu Ala Glu Phe Trp
225                 230                 235                 240
Ala Arg Leu Leu Glu Arg Leu Phe Lys Gln Leu His Pro Gln Leu Leu
                245                 250                 255
Leu Pro Asp Asp Tyr Leu Asp Cys Leu Gly Lys Gln Ala Glu Ala Leu
            260                 265                 270
Arg Pro Phe Gly Glu Ala Pro Arg Glu Leu Arg Leu Arg Ala Thr Arg
        275                 280                 285
Ala Phe Val Ala Ala Arg Ser Phe Val Gln Gly Leu Gly Val Ala Ser
    290                 295                 300
Asp Val Val Arg Lys Val Ala Gln Val Pro Leu Gly Pro Glu Cys Ser
305                 310                 315                 320
Arg Ala Val Ile Glu Ala Gly Ser Tyr Cys Ala Leu His Cys Val Gly
                325                 330                 335
Val Pro Gly Ala Arg Pro Cys Pro Asp Tyr Cys Arg Asn Val Leu Lys
            340                 345                 350
Gly Cys Leu Ala Asn Gln Ala Asp Leu Asp Ala Glu Trp Arg Asn Leu
        355                 360                 365
Leu Asp Ser Met Val Leu Ile Thr Asp Lys Phe Trp Gly Thr Ser Gly
    370                 375                 380
Val Glu Ser Val Ile Gly Ser Val His Thr Trp Leu Ala Glu Ala Ile
385                 390                 395                 400
Asn Ala Leu Gln Asp Asn Arg Asp Thr Leu Thr Ala Lys Val Ile Gln
                405                 410                 415
Gly Cys Gly Asn Pro Lys Val Asn Pro Gln Gly Pro Gly Pro Glu Glu
            420                 425                 430
Lys Arg Arg Arg Gly Lys Leu Ala Pro Arg Glu Arg Pro Pro Ser Gly
        435                 440                 445
Thr Leu Glu Lys Leu Val Ser Glu Ala Lys Ala Gln Leu Arg Asp Val
    450                 455                 460
Gln Asp Phe Trp Ile Ser Leu Pro Gly Thr Leu Cys Ser Glu Lys Met
465                 470                 475                 480
Ala Leu Ser Thr Ala Ser Asp Asp Arg Cys Trp Asn Gly Met Ala Arg
                485                 490                 495
Gly Arg Tyr Leu Pro Glu Val Met Gly Asp Gly Leu Ala Asn Gln Ile
            500                 505                 510
Asn Asn Pro Glu Val Glu Val Asp Ile Thr Lys Pro Asp Met Thr Ile
        515                 520                 525
Arg Gln Gln Ile Met Gln Leu Lys Ile Met Thr Asn Arg Leu Arg Ser
    530                 535                 540
Ala Tyr Asn Gly Asn Asp Val Asp Phe Gln Asp Ala Ser Asp Asp Gly
545                 550                 555                 560
Ser Gly Ser Gly Ser Gly Asp Gly Cys Leu Asp Asp Leu Cys Gly Arg
                565                 570                 575
Lys Val Ser Arg Lys Ser Ser Ser Ser Arg Thr Pro Leu Thr His Ala
            580                 585                 590
Leu Pro Gly Leu Ser Glu Gln Glu Gly Gln Lys Thr Ser Ala Ala Ser
        595                 600                 605
Cys Pro Gln Pro Pro Thr Phe Leu Leu Pro Leu Leu Leu Phe Leu Ala
    610                 615                 620
Leu Thr Val Ala Arg Pro Arg Trp Arg
625                 630         633
```

<210> 1280
<211> 133
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(133)
<223> X = any amino acid or stop code

<400> 1280

```
Ala Thr Glu Leu Thr Arg Ala Gly Met Glu Ala Ser Ala Leu Thr Lys
 1               5                  10                  15
Ser Ala Val Thr Ser Val Ala Lys Val Val Arg Val Ala Ser Gly Ser
            20                  25                  30
Ala Val Val Leu Pro Leu Ala Arg Ile Ala Thr Ser Cys Asp Xaa Arg
        35                  40                  45
Val Gly Gly Pro Val Gln Ala Val Pro Met Val Leu Ser Ala Met Gly
    50                  55                  60
Leu Gln Leu Arg Ala Gly Ile Ala Ser Ser Ser Ile Ala Ala Lys Met
65                  70                  75                  80
Met Ser Ala Ala Ala Ile Ala Asn Gly Gly Gly Val Ser Pro Gly Gln
                85                  90                  95
Pro Leu Trp Leu Leu Leu Gln Ser Leu Gly Ala Thr Gly Leu Ser Gly
            100                 105                 110
Leu Thr Lys Phe Ile Leu Gly Ser Ile Gly Ser Ala Ile Ala Ala Val
        115                 120                 125
Ile Ala Arg Phe Tyr
    130             133
```

<210> 1281
<211> 457
<212>Amino acid
<213> Homo sapiens

<400> 1281

```
Thr Asn Gly Arg Asn Leu Leu His His Trp Ile Leu Gly Val Cys Gly
 1               5                  10                  15
Met His Pro His His Gln Glu Thr Leu Lys Lys Asn Arg Val Val Leu
            20                  25                  30
Ala Lys Gln Leu Leu Leu Ser Glu Leu Leu Glu His Leu Leu Glu Lys
        35                  40                  45
Asp Ile Ile Thr Leu Glu Met Arg Glu Leu Ile Gln Ala Lys Val Gly
    50                  55                  60
Ser Phe Ser Gln Asn Val Glu Leu Leu Asn Leu Leu Pro Lys Arg Gly
65                  70                  75                  80
Pro Gln Ala Phe Asp Ala Phe Cys Glu Ala Leu Arg Glu Thr Lys Gln
                85                  90                  95
Gly His Leu Glu Asp Met Leu Leu Thr Thr Leu Ser Gly Leu Gln His
            100                 105                 110
Val Leu Pro Pro Leu Ser Cys Asp Tyr Asp Leu Ser Leu Pro Phe Pro
        115                 120                 125
Val Cys Glu Ser Cys Pro Leu Tyr Lys Lys Leu Arg Leu Ser Thr Asp
    130                 135                 140
Thr Val Glu His Ser Leu Asp Asn Lys Asp Gly Pro Val Cys Leu Gln
145                 150                 155                 160
Val Lys Pro Cys Thr Pro Glu Phe Tyr Gln Thr His Phe Gln Leu Ala
                165                 170                 175
Tyr Arg Leu Gln Ser Arg Pro Arg Gly Leu Ala Leu Val Leu Ser Asn
            180                 185                 190
Val His Phe Thr Gly Glu Lys Glu Leu Glu Phe Arg Ser Gly Gly Asp
        195                 200                 205
Val Asp His Ser Thr Leu Val Thr Leu Phe Lys Leu Leu Gly Tyr Asp
    210                 215                 220
```

```
Val His Val Leu Cys Asp Gln Thr Ala Gln Glu Met Gln Glu Lys Leu
225                 230                 235                 240
Gln Asn Phe Ala Gln Leu Pro Ala His Arg Val Thr Asp Ser Cys Ile
                245                 250                 255
Val Ala Leu Leu Ser His Gly Val Glu Gly Ala Ile Tyr Gly Val Asp
            260                 265                 270
Gly Lys Leu Leu Gln Leu Gln Glu Val Phe Gln Leu Phe Asp Asn Ala
        275                 280                 285
Asn Cys Pro Ser Leu Gln Asn Lys Pro Lys Met Phe Phe Ile Gln Ala
    290                 295                 300
Cys Arg Gly Gly Ala Ile Gly Ser Leu Gly His Leu Leu Leu Phe Thr
305                 310                 315                 320
Ala Ala Thr Ala Ser Leu Ala Leu Glu Thr Asp Arg Gly Val Asp Gln
                325                 330                 335
Gln Asp Gly Lys Asn His Ala Gly Ser Pro Gly Cys Glu Glu Ser Asp
            340                 345                 350
Ala Gly Lys Glu Lys Leu Pro Lys Met Arg Leu Pro Thr Arg Ser Asp
        355                 360                 365
Met Ile Cys Gly Tyr Ala Cys Leu Lys Gly Thr Ala Ala Met Arg Asn
    370                 375                 380
Thr Lys Arg Gly Ser Trp Tyr Ile Glu Ala Leu Ala Gln Val Phe Ser
385                 390                 395                 400
Glu Arg Ala Cys Asp Met His Val Ala Asp Met Leu Val Lys Val Asn
                405                 410                 415
Ala Leu Ile Lys Asp Arg Glu Gly Tyr Ala Pro Gly Thr Glu Phe His
            420                 425                 430
Arg Cys Lys Glu Met Ser Glu Tyr Cys Ser Thr Leu Cys Arg His Leu
        435                 440                 445
Tyr Leu Phe Pro Gly His Pro Pro Thr
    450                 455     457
```

<210> 1282
<211> 195
<212>Amino acid
<213> Homo sapiens

<400> 1282

```
Val Arg Gly Lys Glu Val Met Ala Ala Leu Cys Arg Thr Arg Ala Val
  1               5                  10                  15
Ala Ala Glu Ser His Phe Leu Arg Val Phe Leu Phe Phe Arg Pro Phe
             20                  25                  30
Arg Gly Val Gly Thr Glu Ser Gly Ser Glu Ser Gly Ser Ser Asn Ala
         35                  40                  45
Lys Glu Pro Lys Thr Arg Ala Gly Gly Phe Ala Ser Ala Leu Glu Arg
     50                  55                  60
His Ser Glu Leu Leu Gln Lys Val Glu Pro Leu Gln Lys Gly Ser Pro
 65                  70                  75                  80
Lys Asn Val Glu Ser Phe Ala Ser Met Leu Arg His Ser Pro Leu Thr
                 85                  90                  95
Gln Met Gly Pro Ala Lys Asp Lys Leu Val Ile Gly Arg Ile Phe His
            100                 105                 110
Ile Val Glu Asn Asp Leu Tyr Ile Asp Phe Gly Gly Lys Phe His Cys
        115                 120                 125
Val Cys Arg Arg Pro Glu Val Asp Gly Glu Lys Tyr Gln Lys Gly Thr
    130                 135                 140
Arg Val Arg Leu Arg Leu Leu Asp Leu Glu Leu Thr Ser Arg Phe Leu
145                 150                 155                 160
Gly Ala Thr Thr Asp Thr Thr Val Leu Glu Ala Asn Ala Val Leu Leu
                165                 170                 175
```

```
Gly Ile Gln Glu Ser Lys Asp Ser Arg Ser Lys Glu Glu His Leu Glu
            180                 185                 190
Lys Tyr Ile
        195
```

<210> 1283
<211> 1499
<212>Amino acid
<213> Homo sapiens

<400> 1283

```
Ile Pro Gly Ala Ser Pro Ala Pro Arg Arg Ala Ala Pro Leu Arg Leu
  1               5                  10                  15
Gly Leu Arg Leu Ala Ser Gly Trp Ala Arg Ala Pro Gly Gly Val Ser
            20                  25                  30
Pro Val Pro Gly Pro Gly Met Gly Gly Asp Ala Pro Thr Met Ala Arg
        35                  40                  45
Ala Gln Ala Leu Val Leu Glu Leu Thr Phe Gln Leu Cys Ala Pro Glu
    50                  55                  60
Thr Glu Thr Pro Glu Val Gly Cys Thr Phe Glu Glu Gly Ser Asp Pro
65                  70                  75                  80
Ala Val Pro Cys Glu Tyr Ser Gln Ala Gln Tyr Asp Asp Phe Gln Trp
                85                  90                  95
Glu Gln Val Arg Ile His Pro Gly Thr Arg Ala Pro Ala Asp Leu Pro
            100                 105                 110
His Gly Ser Tyr Leu Met Val Asn Thr Ser Gln His Ala Pro Gly Gln
        115                 120                 125
Arg Ala His Val Ile Phe Gln Ser Leu Ser Glu Asn Asp Thr His Cys
    130                 135                 140
Val Gln Phe Ser Tyr Phe Leu Tyr Ser Arg Asp Gly His Ser Pro Gly
145                 150                 155                 160
Thr Leu Gly Val Tyr Val Arg Val Asn Gly Gly Pro Leu Gly Ser Ala
                165                 170                 175
Val Trp Asn Met Thr Gly Ser His Gly Arg Gln Trp His Gln Ala Glu
            180                 185                 190
Leu Ala Val Ser Thr Phe Trp Pro Asn Glu Tyr Gln Val Leu Phe Glu
        195                 200                 205
Ala Leu Ile Ser Pro Asp Arg Arg Gly Tyr Met Gly Leu Asp Asp Ile
    210                 215                 220
Leu Leu Leu Ser Tyr Pro Cys Ala Lys Ala Pro His Phe Ser Arg Leu
225                 230                 235                 240
Gly Asp Val Glu Val Asn Ala Gly Gln Asn Ala Ser Phe Gln Cys Met
                245                 250                 255
Ala Ala Gly Arg Ala Ala Glu Ala Glu Arg Phe Leu Leu Gln Arg Gln
            260                 265                 270
Ser Gly Ala Leu Val Pro Ala Ala Gly Val Arg His Ile Ser His Arg
        275                 280                 285
Arg Phe Leu Ala Thr Phe Pro Leu Ala Ala Val Ser Arg Ala Glu Gln
    290                 295                 300
Asp Leu Tyr Arg Cys Val Ser Gln Ala Pro Arg Gly Arg Gly Thr Ser
305                 310                 315                 320
Leu Asn Phe Ala Glu Phe Met Val Lys Glu Pro Pro Thr Pro Ile Ala
                325                 330                 335
Pro Pro Gln Leu Leu Arg Ala Gly Pro Thr Tyr Leu Ile Ile Gln Leu
            340                 345                 350
Asn Thr Asn Ser Ile Ile Gly Asp Gly Pro Ile Val Arg Lys Glu Ile
        355                 360                 365
Glu Tyr Arg Met Ala Arg Gly Pro Trp Ala Glu Val His Ala Val Ser
    370                 375                 380
```

```
Leu Gln Thr Tyr Lys Leu Trp His Leu Asp Pro Asp Thr Glu Tyr Glu
385                 390                 395                 400
Ile Ser Val Leu Leu Thr Arg Pro Gly Asp Gly Gly Thr Gly Arg Pro
                405                 410                 415
Gly Pro Pro Leu Ile Ser Arg Thr Lys Cys Ala Glu Pro Met Arg Ala
            420                 425                 430
Pro Lys Gly Leu Ala Phe Ala Glu Ile Gln Ala Arg Gln Leu Thr Leu
        435                 440                 445
Gln Trp Glu Pro Leu Gly Tyr Asn Val Thr Arg Cys His Thr Tyr Thr
    450                 455                 460
Val Ser Leu Cys Tyr His Tyr Thr Leu Gly Ser Ser His Asn Gln Thr
465                 470                 475                 480
Ile Arg Glu Cys Val Lys Thr Glu Gln Gly Val Ser Arg Tyr Thr Met
                485                 490                 495
Lys Asn Leu Leu Pro Tyr Arg Asn Val His Val Arg Leu Val Leu Thr
            500                 505                 510
Asn Pro Glu Gly Arg Lys Glu Gly Lys Glu Val Thr Phe Gln Thr Asp
        515                 520                 525
Glu Asp Val Pro Ser Gly Ile Ala Ala Glu Ser Leu Thr Phe Thr Pro
    530                 535                 540
Leu Glu Asp Met Ile Phe Leu Lys Trp Glu Glu Pro Gln Glu Pro Asn
545                 550                 555                 560
Gly Leu Ile Thr Gln Tyr Glu Ile Ser Tyr Gln Ser Ile Glu Ser Ser
                565                 570                 575
Asp Pro Ala Val Asn Val Pro Gly Pro Arg Arg Thr Ile Ser Lys Leu
            580                 585                 590
Arg Asn Glu Thr Tyr His Val Phe Ser Asn Leu His Pro Gly Thr Thr
        595                 600                 605
Tyr Leu Phe Ser Val Arg Ala Arg Thr Gly Lys Gly Phe Gly Gln Ala
    610                 615                 620
Ala Leu Thr Glu Ile Thr Thr Asn Ile Ser Ala Pro Ser Phe Asp Tyr
625                 630                 635                 640
Ala Asp Met Pro Ser Pro Leu Gly Glu Ser Glu Asn Thr Ile Thr Val
                645                 650                 655
Leu Leu Arg Pro Ala Gln Gly Arg Gly Ala Pro Ile Ser Val Tyr Gln
            660                 665                 670
Val Ile Val Glu Glu Glu Gln Gly Ser Arg Arg Leu Arg Arg Glu Pro
        675                 680                 685
Gly Gly Gln Asp Cys Phe Pro Val Pro Leu Thr Phe Glu Ala Ala Leu
    690                 695                 700
Ala Arg Gly Leu Val Asp Tyr Phe Gly Ala Glu Leu Ala Ala Ser Ser
705                 710                 715                 720
Leu Pro Glu Ala Met Pro Phe Thr Val Gly Asp Asn Lys Thr Tyr Arg
                725                 730                 735
Gly Phe Trp Asn Pro Pro Leu Glu Pro Arg Lys Ala Tyr Leu Ile Tyr
            740                 745                 750
Phe Gln Ala Ala Ser His Leu Lys Gly Glu Thr Arg Leu Asn Cys Ile
        755                 760                 765
Arg Ile Ala Arg Lys Ala Ala Cys Lys Glu Ser Lys Arg Pro Leu Glu
    770                 775                 780
Val Ser Gln Arg Ser Glu Glu Met Gly Leu Ile Leu Gly Ile Cys Ala
785                 790                 795                 800
Gly Gly Leu Ala Val Leu Ile Leu Leu Leu Gly Ala Ile Ile Val Ile
                805                 810                 815
Ile Arg Lys Gly Arg Asp His Tyr Ala Tyr Ser Tyr Tyr Pro Lys Pro
            820                 825                 830
Val Asn Met Thr Lys Ala Thr Val Asn Tyr Arg Gln Glu Lys Thr His
        835                 840                 845
Met Met Ser Ala Val Asp Arg Ser Phe Thr Asp Gln Ser Thr Leu Gln
    850                 855                 860
Glu Asp Glu Arg Leu Gly Leu Ser Phe Met Asp Thr His Gly Tyr Ser
865                 870                 875                 880
Thr Arg Gly Asp Gln Arg Ser Gly Gly Val Thr Glu Ala Ser Ser Leu
                885                 890                 895
```

```
Leu Gly Gly Ser Pro Arg Arg Pro Cys Gly Arg Lys Gly Ser Pro Tyr
            900                 905                 910
His Thr Gly Gln Leu His Pro Ala Val Arg Val Ala Asp Leu Leu Gln
        915                 920                 925
His Ile Asn Gln Met Lys Thr Ala Glu Gly Tyr Gly Phe Lys Gln Glu
    930                 935                 940
Tyr Glu Ser Phe Phe Glu Gly Trp Asp Ala Thr Lys Lys Lys Asp Lys
945                 950                 955                 960
Val Lys Gly Ser Arg Gln Glu Pro Met Pro Ala Tyr Asp Arg His Arg
                965                 970                 975
Val Lys Leu His Pro Met Leu Gly Asp Pro Asn Ala Asp Tyr Ile Asn
            980                 985                 990
Ala Asn Tyr Ile Asp Ile Arg Ile Asn Arg Glu Gly Tyr His Arg Ser
        995                1000                1005
Asn His Phe Ile Ala Thr Gln Gly Pro Lys Pro Glu Met Val Tyr Asp
   1010                1015                1020
Phe Trp Arg Met Val Trp Gln Glu His Cys Ser Ser Ile Val Met Ile
1025                1030                1035                1040
Thr Lys Leu Val Glu Val Gly Arg Val Lys Cys Ser Arg Tyr Trp Pro
                1045                1050                1055
Glu Asp Ser Asp Thr Tyr Gly Asp Ile Lys Ile Met Leu Val Lys Thr
            1060                1065                1070
Glu Thr Leu Ala Glu Tyr Val Val Arg Thr Phe Ala Leu Glu Arg Arg
        1075                1080                1085
Gly Tyr Ser Ala Arg His Glu Val Arg Gln Phe His Phe Thr Ala Trp
   1090                1095                1100
Pro Glu His Gly Val Pro Tyr His Ala Thr Gly Leu Leu Ala Phe Ile
1105                1110                1115                1120
Arg Arg Val Lys Ala Ser Thr Pro Pro Asp Ala Gly Pro Ile Val Ile
                1125                1130                1135
His Cys Ser Ala Gly Thr Gly Arg Thr Gly Cys Tyr Ile Val Leu Asp
            1140                1145                1150
Val Met Leu Asp Met Ala Glu Cys Glu Gly Val Val Asp Ile Tyr Asn
        1155                1160                1165
Cys Val Lys Thr Leu Cys Ser Arg Arg Val Asn Met Ile Gln Thr Glu
   1170                1175                1180
Glu Gln Tyr Ile Phe Ile His Asp Ala Ile Leu Glu Ala Cys Leu Cys
1185                1190                1195                1200
Gly Glu Thr Thr Ile Pro Val Ser Glu Phe Lys Ala Thr Tyr Lys Glu
                1205                1210                1215
Met Ile Arg Ile Asp Pro Gln Ser Asn Ser Ser Gln Leu Arg Glu Glu
            1220                1225                1230
Phe Gln Thr Leu Asn Ser Val Thr Pro Pro Leu Asp Val Glu Glu Cys
        1235                1240                1245
Ser Ile Ala Leu Leu Pro Arg Asn Arg Asp Lys Asn Arg Ser Met Asp
   1250                1255                1260
Val Leu Pro Pro Asp Arg Cys Leu Pro Phe Leu Ile Ser Thr Asp Gly
1265                1270                1275                1280
Asp Ser Asn Asn Tyr Ile Asn Ala Ala Leu Thr Asp Ser Tyr Thr Arg
                1285                1290                1295
Ser Ala Ala Phe Ile Val Thr Leu His Pro Leu Gln Ser Thr Thr Pro
            1300                1305                1310
Asp Phe Trp Gly Leu Val Tyr Asp Tyr Gly Cys Thr Ser Ile Val Met
        1315                1320                1325
Leu Asn Gln Leu Asn Gln Ser Asn Ser Ala Trp Pro Cys Leu Gln Tyr
   1330                1335                1340
Trp Pro Glu Pro Gly Arg Gln Gln Tyr Gly Leu Met Glu Val Glu Phe
1345                1350                1355                1360
Met Ser Gly Thr Ala Asp Glu Asp Leu Val Ala Arg Val Phe Arg Val
                1365                1370                1375
Gln Asn Ile Ser Arg Leu Gln Glu Gly His Leu Leu Val Arg His Phe
            1380                1385                1390
Gln Phe Leu Arg Trp Ser Ala Tyr Arg Asp Thr Pro Asp Ser Lys Lys
        1395                1400                1405
```

```
Ala Phe Leu His Leu Leu Ala Glu Gly Asp Lys Trp Gln Ala Glu Ser
   1410                1415                1420
Gly Asp Gly Arg Thr Ile Val His Cys Leu Asn Gly Gly Gly Arg Ser
1425                1430                1435                1440
Gly Thr Phe Cys Ala Cys Ala Thr Val Leu Glu Met Ile Arg Cys His
                1445                1450                1455
Asn Leu Val Asp Val Phe Phe Ala Ala Lys Thr Leu Arg Asn Tyr Lys
            1460                1465                1470
Pro Asn Met Val Glu Thr Met Asp Gln Tyr His Phe Cys Tyr Asp Val
        1475                1480                1485
Ala Leu Glu Tyr Leu Glu Gly Leu Glu Ser Arg
   1490                1495            1499
```

<210> 1284
<211> 430
<212>Amino acid
<213> Homo sapiens

<400> 1284

```
Thr Lys Pro Arg Lys Arg Arg His Gln Pro Ala Ser Gln Arg Gln Arg
  1                5                  10                  15
Pro Trp Ser Ser Asp Ser Thr Gly Asp Leu Leu Ala Arg Gly Lys Gly
             20                  25                  30
Arg Lys Glu Glu Asn Lys Gly Ser Asp Arg Val Ser Leu Ala Pro Pro
         35                  40                  45
Ser Leu Arg Arg Pro Met Met Cys Gln Ser Glu Ala Arg Gln Gly Pro
     50                  55                  60
Glu Leu Arg Ala Ala Lys Trp Leu His Phe Pro Gln Leu Ala Leu Arg
 65                  70                  75                  80
Arg Arg Leu Gly Gln Leu Ser Cys Met Ser Arg Pro Ala Leu Lys Leu
                 85                  90                  95
Arg Ser Trp Pro Leu Thr Val Leu Tyr Tyr Leu Leu Pro Phe Gly Ala
            100                 105                 110
Leu Arg Pro Leu Ser Arg Val Gly Trp Arg Pro Val Ser Arg Val Ala
        115                 120                 125
Leu Tyr Lys Ser Val Pro Thr Arg Leu Leu Ser Arg Ala Trp Gly Arg
    130                 135                 140
Leu Asn Gln Val Glu Leu Pro His Trp Leu Arg Arg Pro Val Tyr Ser
145                 150                 155                 160
Leu Tyr Ile Trp Thr Phe Gly Val Asn Met Lys Glu Ala Ala Val Glu
                165                 170                 175
Asp Leu His His Tyr Arg Asn Leu Ser Glu Phe Phe Arg Arg Lys Leu
            180                 185                 190
Lys Pro Gln Ala Arg Pro Val Cys Gly Leu His Ser Val Ile Ser Pro
        195                 200                 205
Ser Asp Gly Arg Ile Leu Asn Phe Gly Gln Val Lys Asn Cys Glu Val
    210                 215                 220
Glu Gln Val Lys Gly Val Thr Tyr Ser Leu Glu Ser Phe Leu Gly Pro
225                 230                 235                 240
Arg Met Cys Thr Glu Asp Leu Pro Phe Pro Pro Ala Ala Ser Cys Asp
                245                 250                 255
Ser Phe Lys Asn Gln Leu Val Thr Arg Glu Gly Asn Glu Leu Tyr His
            260                 265                 270
Cys Val Ile Tyr Leu Ala Pro Gly Asp Tyr His Cys Phe His Ser Pro
        275                 280                 285
Thr Asp Trp Thr Val Ser His Arg Arg His Phe Pro Gly Ser Leu Met
    290                 295                 300
Ser Val Asn Pro Gly Met Ala Arg Trp Ile Lys Glu Leu Phe Cys His
305                 310                 315                 320
```

```
Asn Glu Arg Val Val Leu Thr Gly Asp Trp Lys His Gly Phe Phe Ser
                325                 330                 335
Leu Thr Ala Val Gly Ala Thr Asn Trp Gly Ser Ile Arg Ile Tyr Phe
            340                 345                 350
Asp Arg Asp Leu His Thr Asn Ser Pro Arg His Ser Lys Gly Ser Tyr
        355                 360                 365
Asn Asp Phe Ser Phe Val Thr His Thr Asn Arg Glu Gly Val Pro Met
    370                 375                 380
Ala Leu Arg Gly Glu His Leu Gly Gln Ser Phe Asn Leu Gly Ser Thr
385                 390                 395                 400
Ile Val Leu Ile Phe Glu Ala Pro Lys Asp Phe Asn Phe Gln Leu Lys
                405                 410                 415
Thr Gly Gln Lys Ile Arg Phe Gly Glu Ala Leu Gly Ser Leu
            420                 425                 430
```

<210> 1285
<211> 957
<212>Amino acid
<213> Homo sapiens

<400> 1285

```
Ala Glu Leu Gly Leu Phe Gly Ser Leu Arg Phe Ser Ser Leu Leu His
  1               5                  10                  15
Phe Pro Pro Arg Pro Arg Ser Pro Ala Ser Ala Cys Gly Pro Gly Glu
            20                  25                  30
Gly Arg Met Glu Arg Gly Leu Pro Leu Leu Cys Ala Val Leu Ala Leu
        35                  40                  45
Val Leu Ala Pro Ala Gly Ala Phe Arg Asn Asp Lys Cys Gly Asp Thr
    50                  55                  60
Ile Lys Ile Glu Ser Pro Gly Tyr Leu Thr Ser Pro Gly Tyr Pro His
65                  70                  75                  80
Ser Tyr His Pro Ser Glu Lys Cys Glu Trp Leu Ile Gln Ala Pro Asp
                85                  90                  95
Pro Tyr Gln Arg Ile Met Ile Asn Phe Asn Pro His Phe Asp Leu Glu
            100                 105                 110
Asp Arg Asp Cys Lys Tyr Asp Tyr Val Glu Val Phe Asp Gly Glu Asn
        115                 120                 125
Glu Asn Gly His Phe Arg Gly Lys Phe Cys Gly Lys Ile Ala Pro Pro
    130                 135                 140
Pro Val Val Ser Ser Gly Pro Phe Leu Phe Ile Lys Phe Val Ser Asp
145                 150                 155                 160
Tyr Glu Thr His Gly Ala Gly Phe Ser Ile Arg Tyr Glu Ile Phe Lys
                165                 170                 175
Arg Gly Pro Glu Cys Ser Gln Asn Tyr Thr Thr Pro Ser Gly Val Ile
            180                 185                 190
Lys Ser Pro Gly Phe Pro Glu Lys Tyr Pro Asn Ser Leu Glu Cys Thr
        195                 200                 205
Tyr Ile Val Phe Ala Pro Lys Met Ser Glu Ile Ile Leu Asp Phe Glu
    210                 215                 220
Ser Phe Asp Leu Glu Pro Asp Ser Asn Pro Pro Gly Gly Met Phe Cys
225                 230                 235                 240
Arg Tyr Asp Arg Leu Glu Ile Trp Asp Gly Phe Pro Asp Val Gly Pro
                245                 250                 255
His Ile Gly Arg Tyr Cys Gly Gln Lys Thr Pro Gly Arg Ile Arg Ser
            260                 265                 270
Ser Ser Gly Ile Leu Ser Met Val Phe Tyr Thr Asp Ser Ala Ile Ala
        275                 280                 285
Lys Glu Gly Phe Ser Ala Asn Tyr Ser Val Leu Gln Ser Ser Val Ser
    290                 295                 300
```

```
Glu Asp Phe Lys Cys Met Glu Ala Leu Gly Met Glu Ser Gly Glu Ile
305                 310                 315                 320
His Ser Asp Gln Ile Thr Ala Ser Ser Gln Tyr Ser Thr Asn Trp Ser
                325                 330                 335
Ala Glu Arg Ser Arg Leu Asn Tyr Pro Glu Asn Gly Trp Thr Pro Gly
            340                 345                 350
Glu Asp Ser Tyr Arg Glu Trp Ile Gln Val Asp Leu Gly Leu Leu Arg
        355                 360                 365
Phe Val Thr Ala Val Gly Thr Gln Gly Ala Ile Ser Lys Glu Thr Lys
    370                 375                 380
Lys Lys Tyr Tyr Val Lys Thr Tyr Lys Ile Asp Val Ser Ser Asn Gly
385                 390                 395                 400
Glu Asp Trp Ile Thr Ile Lys Glu Gly Asn Lys Pro Val Leu Phe Gln
                405                 410                 415
Gly Asn Thr Asn Pro Thr Asp Val Val Val Ala Val Phe Pro Lys Pro
            420                 425                 430
Leu Ile Thr Arg Phe Val Arg Ile Lys Pro Ala Thr Trp Glu Thr Gly
        435                 440                 445
Ile Ser Met Arg Phe Glu Val Tyr Gly Cys Lys Ile Thr Asp Tyr Pro
    450                 455                 460
Cys Ser Gly Met Leu Gly Met Val Ser Gly Leu Ile Ser Asp Ser Gln
465                 470                 475                 480
Ile Thr Ser Ser Asn Gln Gly Asp Arg Asn Trp Met Pro Glu Asn Ile
                485                 490                 495
Arg Leu Val Thr Ser Arg Ser Gly Trp Ala Leu Pro Pro Ala Pro His
            500                 505                 510
Ser Tyr Ile Asn Glu Trp Leu Gln Ile Asp Leu Gly Glu Glu Lys Ile
        515                 520                 525
Val Arg Gly Ile Ile Ile Gln Gly Gly Lys His Arg Glu Asn Lys Val
    530                 535                 540
Phe Met Arg Lys Phe Lys Ile Gly Tyr Ser Asn Asn Gly Ser Asp Trp
545                 550                 555                 560
Lys Met Ile Met Asp Asp Ser Lys Arg Lys Ala Lys Ser Phe Glu Gly
                565                 570                 575
Asn Asn Asn Tyr Asp Thr Pro Glu Leu Arg Thr Phe Pro Ala Leu Ser
            580                 585                 590
Thr Arg Phe Ile Arg Ile Tyr Pro Glu Arg Ala Thr His Gly Gly Leu
        595                 600                 605
Gly Leu Arg Met Glu Leu Leu Gly Cys Glu Val Glu Ala Pro Thr Ala
    610                 615                 620
Gly Pro Thr Thr Pro Asn Gly Asn Leu Val Asp Glu Cys Asp Asp Asp
625                 630                 635                 640
Gln Ala Asn Cys His Ser Gly Thr Gly Asp Asp Phe Gln Leu Thr Gly
                645                 650                 655
Gly Thr Thr Val Leu Ala Thr Glu Lys Pro Thr Val Ile Asp Ser Thr
            660                 665                 670
Ile Gln Ser Glu Phe Pro Thr Tyr Gly Phe Asn Cys Glu Phe Gly Trp
        675                 680                 685
Gly Ser His Lys Thr Phe Cys His Trp Glu His Asp Asn His Val Gln
    690                 695                 700
Leu Lys Trp Ser Val Leu Thr Ser Lys Thr Gly Pro Ile Gln Asp His
705                 710                 715                 720
Thr Gly Asp Gly Asn Phe Ile Tyr Ser Gln Ala Asp Glu Asn Gln Lys
                725                 730                 735
Gly Lys Val Ala Arg Leu Val Ser Pro Val Val Tyr Ser Gln Asn Ser
            740                 745                 750
Ala His Cys Met Thr Phe Trp Tyr His Met Ser Gly Ser His Val Gly
        755                 760                 765
Thr Leu Arg Val Lys Leu Arg Tyr Gln Lys Pro Glu Glu Tyr Asp Gln
    770                 775                 780
Leu Val Trp Met Ala Ile Gly His Gln Gly Asp His Trp Lys Glu Gly
785                 790                 795                 800
Arg Val Leu Leu His Lys Ser Leu Lys Leu Tyr Gln Val Ile Phe Glu
                805                 810                 815
```

```
Gly Glu Ile Gly Lys Gly Asn Leu Gly Gly Ile Ala Val Asp Asp Ile
            820                 825                 830
Ser Ile Asn Asn His Ile Ser Gln Glu Asp Cys Ala Lys Pro Ala Asp
        835                 840                 845
Leu Asp Lys Lys Asn Pro Glu Ile Lys Ile Asp Glu Thr Gly Ser Thr
    850                 855                 860
Pro Gly Tyr Glu Gly Glu Gly Glu Gly Asp Lys Asn Ile Ser Arg Lys
865                 870                 875                 880
Pro Gly Asn Val Leu Lys Thr Leu Glu Pro Ile Leu Ile Thr Ile Ile
                885                 890                 895
Ala Met Ser Ala Leu Gly Val Leu Leu Gly Ala Val Cys Gly Val Val
            900                 905                 910
Leu Tyr Cys Ala Cys Trp His Asn Gly Met Ser Glu Arg Asn Leu Ser
        915                 920                 925
Ala Leu Glu Asn Tyr Asn Phe Glu Leu Val Asp Gly Val Lys Leu Lys
    930                 935                 940
Lys Asp Lys Leu Asn Thr Gln Ser Thr Tyr Ser Glu Ala
945                 950                 955     957
```

<210> 1286
<211> 173
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(173)
<223> X = any amino acid or stop code

<400> 1286

```
His Glu Gly Ser Ala Leu Thr Trp Ala Ser His Tyr Gln Glu Arg Leu
  1               5                  10                  15
Asn Ser Glu Gln Ser Cys Leu Asn Glu Trp Thr Ala Met Ala Asp Leu
            20                  25                  30
Glu Ser Leu Arg Pro Pro Ser Ala Glu Pro Gly Gly Ser Val Cys Gly
        35                  40                  45
Gly Glu Gly Leu Gly Gly Gly Glu Gly Arg Ile Met Gln Trp Gly Ala
    50                  55                  60
Trp Trp Arg Gly Glu Arg Ala Pro Xaa Leu Arg Gly Ser Ala Pro Arg
65                  70                  75                  80
Ser Ser Glu Gln Glu Gln Met Glu Gln Ala Ile Arg Ala Glu Leu Trp
                85                  90                  95
Lys Val Leu Asp Val Ser Asp Leu Glu Ser Val Thr Ser Lys Glu Ile
            100                 105                 110
Arg Gln Ala Leu Glu Leu Arg Leu Gly Leu Pro Leu Gln Pro Val Pro
        115                 120                 125
Xaa Leu His Arg Gln Pro Asp Ala Ala Ala Gly Gly Thr Ala Gly Pro
    130                 135                 140
Ser Leu Pro His Leu Pro Pro Pro Leu Pro Gly Leu Arg Val Glu Arg
145                 150                 155                 160
Ser Lys Pro Gly Gly Ala Ala Glu Glu Gln Val Gly Leu
                165                 170         173
```

<210> 1287
<211> 181
<212>Amino acid
<213> Homo sapiens

<400> 1287

```
Met Ala Ala Leu Asp Leu Arg Ala Glu Leu Asp Ser Leu Val Leu Gln
 1               5                  10                  15
Leu Leu Gly Asp Leu Glu Glu Leu Glu Gly Lys Arg Thr Val Leu Asn
            20                  25                  30
Ala Arg Val Glu Glu Gly Trp Leu Ser Leu Ala Lys Ala Arg Tyr Ala
        35                  40                  45
Met Gly Ala Lys Ser Val Gly Pro Leu Gln Tyr Ala Ser His Met Glu
    50                  55                  60
Pro Gln Val Cys Leu His Ala Ser Glu Ala Gln Glu Gly Leu Gln Lys
65                  70                  75                  80
Phe Lys Val Val Arg Ala Gly Val His Ala Pro Glu Glu Val Gly Pro
                85                  90                  95
Arg Glu Ala Gly Leu Arg Arg Arg Lys Gly Pro Thr Lys Thr Pro Glu
            100                 105                 110
Pro Glu Ser Ser Glu Ala Pro Gln Asp Pro Leu Asn Trp Phe Gly Ile
        115                 120                 125
Leu Val Pro His Ser Leu Arg Gln Ala Gln Ala Ser Phe Arg Asp Gly
    130                 135                 140
Leu Gln Leu Ala Ala Asp Ile Ala Ser Leu Gln Asn Arg Ile Asp Trp
145                 150                 155                 160
Gly Arg Ser Gln Leu Arg Gly Leu Gln Glu Lys Leu Lys Gln Leu Glu
                165                 170                 175
Pro Gly Ala Ala  *
            180
```

<210> 1288
<211> 216
<212>Amino acid
<213> Homo sapiens

<400> 1288

```
His Ser Asp Val Gly Ala Ala Thr Ala Val Leu Pro Leu Leu Thr Ala
 1               5                  10                  15
Val Leu Gly Val Thr Val Val Thr Arg Arg Asp Thr Glu Gly Pro Gly
            20                  25                  30
Arg Ala Ala Leu Val His Leu Thr Gly Ser Pro Arg Gln Lys Val Gly
        35                  40                  45
Thr Ser Gly Arg Glu Gly Leu Pro Gly Leu Gly Ala Ser Cys Ala Glu
    50                  55                  60
Ser Glu Leu Glu Arg Glu Thr Gln Glu Pro Arg Ser Arg Gly Arg Cys
65                  70                  75                  80
Ile Phe Gly Ala Ala Arg Trp Arg Gln Val Pro Leu Ala Ser Pro Gln
                85                  90                  95
Arg Pro Phe Leu Leu Ser Pro Gly Pro Arg Leu His Arg Met Gly Leu
            100                 105                 110
Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly Cys Cys Ala
        115                 120                 125
Leu Leu Leu Ser Leu Trp Ala Leu Cys Thr Ala Cys Arg Arg Pro Glu
    130                 135                 140
Asp Ala Val Ala Pro Arg Lys Arg Ala Arg Arg Gln Arg Ala Arg Leu
145                 150                 155                 160
Gln Gly Ser Ala Thr Ala Ala Glu Ala Val Ser Ala Lys Leu Ser Arg
                165                 170                 175
Gly Pro Gly Trp Gly Pro Gln Gly Thr Asp Gln Pro Ser Ser Pro Pro
```

```
            180                 185                 190
Val Pro Thr Glu Ala Asp Pro Pro Leu Leu Pro Gln Gln Val Gly His
        195                 200                 205
Gln Thr Ala Arg Ala Ala Pro Gly
    210                 215 216
```

<210> 1289
<211> 148
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(148)
<223> X = any amino acid or stop code

<400> 1289

```
Leu Thr Gly Pro Gly Gln Arg Leu Ala Gly Thr Thr Glu Gly Pro Arg
  1               5                  10                  15
Arg Cys Arg Gly Ser Ser Gln Ala Pro Thr Pro Thr Trp Lys Leu Val
             20                  25                  30
Asp Thr Arg Leu Cys Ala Ala Ala Pro Trp Leu Ala Ser Arg Ala Pro
         35                  40                  45
Gly His Tyr Ser Gln Met Leu Leu Val Asn Xaa Pro Cys Arg Lys Asp
     50                  55                  60
Trp Leu Val Ser Lys Trp Met Arg Thr Pro Val Cys Gly Gln Ser Pro
 65                  70                  75                  80
Ala Met Thr Asp Arg Pro Arg Ser Glu Ala Gly Arg Asp His Arg Arg
                 85                  90                  95
Ala Lys Ala Leu Pro Gly Leu Ile Pro Gly Ser Asn Pro Asn Leu Glu
            100                 105                 110
Ala Cys Gly His Gln Ala Leu Cys Ser Ser Ser Val Ala Ser Val Gln
        115                 120                 125
Gly Pro Trp Pro Leu Leu Pro Asn Ala Ser Ser Pro Pro Thr Pro Gly
    130                 135                 140
Gln Pro Gln Pro
145         148
```

<210> 1290
<211> 170
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(170)
<223> X = any amino acid or stop code

<400> 1290

```
Lys His Arg Leu Cys Ser Leu Glu Gln Leu Met Thr Leu Ile Ser Ala
  1               5                  10                  15
Ala Arg Glu Tyr Glu Ile Glu Phe Ile Tyr Ala Ile Ser Pro Gly Leu
             20                  25                  30
Asp Ile Thr Phe Ser Asn Pro Lys Glu Val Ser Thr Leu Lys Arg Lys
```

```
         35                  40                  45
Leu Asp Gln Val Ser Gln Phe Gly Cys Arg Ser Phe Ala Leu Leu Phe
     50                  55                  60
Asp Asp Ile Asp His Asn Met Cys Ala Ala Asp Lys Glu Val Phe Ser
 65                  70                  75                  80
Ser Phe Ala His Ala Gln Val Ser Ile Thr Asn Glu Ile Tyr Gln Tyr
                 85                  90                  95
Leu Gly Glu Pro Glu Thr Phe Leu Phe Cys Pro Thr Glu Tyr Cys Ile
            100                 105                 110
Xaa Trp Leu Tyr Ile Xaa Leu Val Phe Leu Glu Tyr Ile Thr Tyr Lys
        115                 120                 125
Gly Pro Trp Ala Pro Phe Ser Leu His Phe Pro Pro Pro Leu Val Cys
    130                 135                 140
Lys Ser Arg Asn Leu Phe Leu Glu Asp Ile Phe Gln Asp Pro Lys Leu
145                 150                 155                 160
Glu Lys Phe Xaa Glu Leu Ile Asn Asp Asn
                165                 170
```

<210> 1291
<211> 98
<212>Amino acid
<213> Homo sapiens

<400> 1291

```
Thr Ser Ala Leu Thr Gln Gly Leu Glu Arg Ile Pro Asp Gln Leu Gly
  1                 5                  10                  15
Tyr Leu Val Leu Ser Glu Gly Ala Val Leu Ala Ser Ser Gly Asp Leu
            20                  25                  30
Glu Asn Asp Glu Gln Ala Ala Ser Ala Ile Ser Glu Leu Val Ser Thr
        35                  40                  45
Ala Cys Gly Phe Arg Leu His Arg Gly Met Asn Val Pro Phe Lys Arg
    50                  55                  60
Leu Ser Val Val Phe Gly Glu His Thr Leu Leu Val Thr Val Ser Gly
65                  70                  75                  80
Gln Arg Val Phe Val Val Lys Arg Gln Asn Arg Gly Arg Glu Pro Ile
                85                  90                  95
Asp Val
    98
```

<210> 1292
<211> 142
<212>Amino acid
<213> Homo sapiens

<400> 1292

```
Ala Lys Arg Ala Glu Arg Thr Ser Arg Leu Gln Gly Leu Gln His Pro
  1                 5                  10                  15
Ser Pro Pro Tyr Pro Pro Ala Thr Leu Gly Val Thr Pro Gly Gln Asp
            20                  25                  30
Arg Thr Leu Gln Leu Gln His Gln Cys Pro Ala Gly Arg Lys Ser Arg
        35                  40                  45
Lys Lys Lys Ser Lys Ala Thr Gln Leu Ser Pro Glu Asp Arg Val Glu
    50                  55                  60
Asp Ala Leu Pro Pro Ser Lys Ala Pro Ser Arg Thr Arg Arg Ala Lys
```

```
 65                  70                  75                  80
Arg Asp Leu Pro Lys Arg Thr Ala Thr Gln Arg Pro Glu Gly Thr Ser
                85                  90                  95
Leu Gln Gln Asp Pro Glu Ala Pro Thr Val Pro Lys Lys Gly Arg Arg
            100                 105                 110
Lys Gly Arg Gln Ala Ala Ser Gly His Cys Arg Pro Arg Lys Val Lys
        115                 120                 125
Ala Asp Ile Pro Ser Leu Glu Pro Glu Gly Thr Ser Ala Ser
    130                 135                 140     142
```

<210> 1293
<211> 89
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(89)
<223> X = any amino acid or stop code

<400> 1293

```
Arg Lys Ser Ser Trp Leu Gly Ala Val Ala His Ala Cys Asn Pro Ser
  1               5                  10                  15
Ser Leu Gly Gly Pro Gly Arg Gln Ile Thr Arg Ser Gly Val Arg Asp
            20                  25                  30
Gln Pro Gly Gln Tyr Gly Glu Thr Pro Ser Leu Leu Lys Ile Gln Thr
        35                  40                  45
Leu Ala Gly Arg Gly Gly Ala Cys Leu Xaa Ser His Ile Leu Arg Arg
    50                  55                  60
Leu Arg Gln Lys Asn Arg Leu Asn Leu Gly Gly Arg Gly Cys Ser Glu
 65                  70                  75                  80
Leu Arg Ser Arg His Cys Ala Pro Ala
                85              89
```

<210> 1294
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 1294

```
Ala Trp Asn Ser Ala Arg Gly Ala Val Ser Pro Leu Trp Val Pro Gly
  1               5                  10                  15
Cys Phe Leu Thr Leu Ser Val Thr Trp Ile Gly Ala Ala Pro Leu Ile
            20                  25                  30
Leu Ser Arg Ile Val Gly Gly Trp Glu Cys Glu Lys His Ser Gln Pro
        35                  40                  45
Trp Gln Val Leu Val Ala Ser Arg Gly Arg Ala Val Cys Gly Gly Val
    50                  55                  60
Leu Val His Pro Gln Trp Val Leu Thr Ala Ala His Cys Ile Arg Lys
 65                  70                  75                  80
```

<210> 1295
<211> 281
<212>Amino acid
<213> Homo sapiens

<400> 1295

```
Ala Glu Met Ala Asp Asp Leu Gly Asp Glu Trp Trp Glu Asn Gln Pro
 1               5                  10                  15
Thr Gly Ala Gly Ser Ser Pro Glu Ala Ser Asp Gly Glu Gly Glu Gly
            20                  25                  30
Asp Thr Glu Val Met Gln Gln Glu Thr Val Pro Val Pro Val Pro Ser
        35                  40                  45
Glu Lys Thr Lys Gln Pro Lys Glu Cys Phe Leu Ile Gln Pro Lys Glu
    50                  55                  60
Arg Lys Glu Asn Thr Thr Lys Thr Arg Lys Arg Arg Lys Lys Lys Ile
65                  70                  75                  80
Thr Asp Val Leu Ala Lys Ser Glu Pro Lys Pro Gly Leu Pro Glu Asp
                85                  90                  95
Leu Gln Lys Leu Met Lys Asp Tyr Tyr Ser Ser Arg Arg Leu Val Ile
            100                 105                 110
Glu Leu Glu Glu Leu Asn Leu Pro Asp Ser Cys Phe Leu Lys Ala Asn
        115                 120                 125
Asp Leu Thr His Ser Leu Ser Ser Tyr Leu Lys Glu Ile Cys Pro Lys
    130                 135                 140
Trp Val Lys Leu Arg Lys Asn His Ser Glu Lys Lys Ser Val Leu Met
145                 150                 155                 160
Leu Ile Ile Cys Ser Ser Ala Val Arg Ala Leu Glu Leu Ile Arg Ser
                165                 170                 175
Met Thr Ala Phe Arg Gly Asp Gly Lys Val Ile Lys Leu Phe Ala Lys
            180                 185                 190
His Ile Lys Val Gln Ala Gln Val Lys Leu Leu Glu Lys Arg Val Val
        195                 200                 205
His Leu Gly Val Gly Thr Pro Gly Arg Ile Lys Glu Leu Val Lys Gln
    210                 215                 220
Gly Gly Leu Asn Leu Ser Pro Leu Lys Phe Leu Val Phe Asp Trp Asn
225                 230                 235                 240
Trp Arg Asp Gln Lys Leu Arg Arg Met Met Asp Ile Pro Glu Ile Arg
                245                 250                 255
Lys Glu Val Phe Glu Leu Leu Glu Met Gly Val Leu Ser Leu Cys Lys
            260                 265                 270
Ser Glu Ser Leu Lys Leu Gly Leu Phe
        275                 280 281
```

<210> 1296
<211> 213
<212>Amino acid
<213> Homo sapiens

<400> 1296

```
Arg Pro Gly Thr Ala Ile Trp Val Val Glu Cys Glu His Gly Arg Pro
 1               5                  10                  15
Ile Ala Glu Ser Glu Gly Gln Glu Gly Arg Gly His Ser Pro Pro Gly
            20                  25                  30
Pro Cys Ser Val Ala Gly Phe Leu Arg Gly Arg Leu Gly Arg Asn Leu
        35                  40                  45
```

```
Glu Ile Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala
     50                  55                  60
Leu Cys Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys
 65                  70                  75                  80
Ala Ala Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly
                 85                  90                  95
Thr Ala Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Trp Gly Arg Gly
            100                 105                 110
Phe Gly Leu Val Glu His Val Leu Gly Gln Asp Ser Ile Leu Asn Gln
        115                 120                 125
Ser Asn Ser Ile Phe Gly Cys Ile Phe Tyr Thr Leu Gln Leu Leu Leu
    130                 135                 140
Gly Cys Leu Arg Thr Arg Trp Ala Ser Val Leu Met Leu Leu Ser Ser
145                 150                 155                 160
Leu Val Ser Leu Ala Gly Ser Val Tyr Leu Ala Trp Ile Leu Phe Phe
                165                 170                 175
Val Leu Tyr Asp Phe Cys Ile Val Cys Ile Thr Thr Tyr Ala Ile Asn
            180                 185                 190
Val Ser Leu Met Trp Leu Ser Phe Arg Lys Val Gln Glu Pro Gln Gly
        195                 200                 205
Lys Ala Lys Arg His
    210             213
```

<210> 1297
<211> 353
<212>Amino acid
<213> Homo sapiens

<400> 1297

```
Glu Ser Pro Ala Pro Pro Ala Phe Arg Pro Ala Met Ala Ala Val Ala
  1                 5                  10                  15
Leu Met Pro Pro Pro Leu Leu Leu Leu Leu Leu Leu Ala Ser Pro Pro
             20                  25                  30
Ala Ala Ser Ala Pro Ser Ala Arg Asp Pro Phe Ala Pro Gln Leu Gly
         35                  40                  45
Asp Thr Gln Asn Cys Gln Leu Arg Cys Arg Asp Arg Asp Leu Gly Pro
     50                  55                  60
Gln Pro Ser Gln Ala Gly Leu Glu Gly Ala Ser Glu Ser Pro Tyr Asp
 65                  70                  75                  80
Arg Ala Val Leu Ile Ser Ala Cys Glu Arg Gly Cys Arg Leu Phe Ser
                 85                  90                  95
Ile Cys Arg Phe Val Ala Arg Ser Ser Lys Pro Asn Ala Thr Gln Thr
            100                 105                 110
Glu Cys Glu Ala Ala Cys Val Glu Ala Tyr Val Lys Glu Ala Glu Gln
        115                 120                 125
Gln Ala Cys Ser His Gly Cys Trp Ser Gln Pro Ala Glu Pro Glu Pro
    130                 135                 140
Glu Gln Lys Arg Lys Val Leu Glu Ala Pro Ser Gly Ala Leu Ser Leu
145                 150                 155                 160
Leu Asp Leu Phe Ser Thr Leu Cys Asn Asp Leu Val Asn Ser Ala Gln
                165                 170                 175
Gly Phe Val Ser Ser Thr Trp Thr Tyr Tyr Leu Gln Thr Asp Asn Gly
            180                 185                 190
Lys Val Val Val Phe Gln Thr Gln Pro Ile Val Glu Ser Leu Gly Phe
        195                 200                 205
Gln Gly Gly Arg Leu Gln Arg Val Glu Val Thr Trp Arg Gly Ser His
    210                 215                 220
Pro Glu Ala Leu Glu Val His Val Asp Pro Val Gly Pro Leu Asp Lys
225                 230                 235                 240
```

```
Val Arg Lys Ala Lys Ile Arg Val Lys Thr Ser Ser Lys Ala Lys Val
                245                 250                 255
Glu Ser Glu Glu Pro Gln Asp Asn Asp Phe Leu Ser Cys Met Ser Arg
            260                 265                 270
Arg Ser Gly Leu Pro Arg Trp Ile Leu Ala Cys Cys Leu Phe Leu Ser
        275                 280                 285
Val Leu Val Met Leu Trp Leu Ser Cys Ser Thr Leu Val Thr Ala Pro
    290                 295                 300
Gly Gln His Leu Lys Phe Gln Pro Leu Thr Leu Glu Gln His Lys Gly
305                 310                 315                 320
Phe Met Met Glu Pro Asp Trp Pro Leu Tyr Pro Pro Pro Ser His Ala
                325                 330                 335
Cys Glu Asp Ser Leu Pro Pro Tyr Lys Leu Lys Leu Asp Leu Thr Lys
            340                 345                 350
Leu
353
```

<210> 1298
<211> 161
<212>Amino acid
<213> Homo sapiens

<400> 1298

```
Phe Pro Glu Leu Gly Thr Ser Leu Ser Ala Met Arg Phe Leu Ala Ala
  1               5                  10                  15
Thr Phe Leu Leu Leu Ala Leu Ser Thr Ala Ala Gln Ala Glu Pro Val
             20                  25                  30
Gln Phe Lys Asp Cys Gly Ser Val Asp Gly Val Ile Lys Glu Val Asn
         35                  40                  45
Val Ser Pro Cys Pro Thr Gln Pro Cys Gln Leu Ser Lys Gly Gln Ser
     50                  55                  60
Tyr Ser Val Asn Val Thr Phe Thr Ser Asn Ile Gln Ser Lys Ser Ser
 65                  70                  75                  80
Lys Ala Val Val His Gly Ile Leu Met Gly Val Pro Val Pro Phe Pro
                 85                  90                  95
Ile Pro Glu Pro Asp Gly Cys Lys Ser Gly Ile Asn Cys Pro Ile Gln
            100                 105                 110
Lys Asp Lys Thr Tyr Ser Tyr Leu Asn Lys Leu Pro Val Lys Ser Glu
        115                 120                 125
Tyr Pro Ser Ile Lys Leu Val Val Glu Trp Gln Leu Gln Asp Asp Lys
    130                 135                 140
Asn Gln Ser Leu Phe Cys Trp Glu Ile Pro Val Gln Ile Val Ser His
145                 150                 155                 160
Leu
161
```

<210> 1299
<211> 128
<212>Amino acid
<213> Homo sapiens

<400> 1299

```
Ala Pro Glu Thr Phe Arg Cys Val Trp Arg Leu Gln Gly Leu Thr Phe
  1               5                  10                  15
```

```
Ile Ala Phe Thr Glu Leu Gln Ala Lys Val Ile Asp Thr Gln Gln Lys
            20                  25                  30
Val Lys Leu Ala Asp Ile Gln Ile Glu Gln Leu Asn Arg Thr Lys Lys
        35                  40                  45
His Ala His Leu Thr Asp Thr Glu Ile Met Thr Leu Val Asp Glu Thr
    50                  55                  60
Asn Met Tyr Glu Gly Val Gly Arg Met Phe Ile Leu Gln Ser Lys Glu
65                  70                  75                  80
Ala Ile His Ser Gln Leu Leu Glu Lys Gln Lys Ile Ala Glu Glu Lys
                85                  90                  95
Ile Lys Glu Leu Glu Gln Lys Lys Ser Tyr Leu Glu Arg Ser Val Lys
            100                 105                 110
Glu Ala Glu Asp Asn Ile Arg Glu Met Leu Met Ala Arg Arg Ala Gln
        115                 120                 125         128
```

<210> 1300
<211> 265
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(265)
<223> X = any amino acid or stop code

<400> 1300

```
His Ser Leu Leu Leu Gly Thr Arg Val Arg Asp Ala Ser Ser Lys Ile
  1               5                  10                  15
Gln Gly Glu Tyr Thr Leu Thr Leu Arg Lys Gly Gly Asn Asn Lys Leu
            20                  25                  30
Ser Arg Val Phe His Arg Asp Gly His Tyr Gly Phe Ser Glu Pro Leu
        35                  40                  45
Thr Phe Cys Ser Val Val Asp Leu Ile Asn His Tyr Arg His Glu Ser
    50                  55                  60
Leu Ala Gln Tyr Asn Ala Lys Leu Asp Thr Arg Leu Leu Tyr Pro Val
65                  70                  75                  80
Ser Lys Tyr Gln Gln Val Arg Ala Gly Leu Gly Ala Arg Glu Gly Ser
                85                  90                  95
Thr Trp Leu Ala Pro Gly Leu Ser Phe Leu Gly Arg Pro Asp Gln Ala
            100                 105                 110
Met His Leu Pro Ser Phe Arg His Val Ser Pro Asp Gln Ile Val Lys
        115                 120                 125
Glu Asp Ser Val Glu Ala Val Gly Ala Gln Leu Lys Val Tyr His Gln
    130                 135                 140
Gln Tyr Gln Asp Lys Ser Arg Glu Tyr Asp Gln Leu Tyr Glu Glu Tyr
145                 150                 155                 160
Thr Arg Thr Ser Gln Glu Leu Gln Met Lys Arg Thr Ala Ile Glu Ala
                165                 170                 175
Phe Asn Glu Thr Ile Lys Ile Phe Glu Glu Gln Gly Gln Thr Gln Glu
            180                 185                 190
Lys Cys Ser Lys Glu Tyr Leu Glu Arg Phe Arg Arg Glu Gly Asn Gln
        195                 200                 205
Thr Lys Glu Met Gln Arg Ile Leu Leu Asn Ser Glu Arg Leu Lys Ser
    210                 215                 220
Arg Ile Ala Glu Ile His Glu Ser Pro His Arg Ser Trp Glu Gln Gln
225                 230                 235                 240
Leu Leu Val Pro Arg Ala Ser Asp Asn Lys Arg Asp Ile Asp Lys Pro
```

```
                245                 250                 255
His Xaa Thr Ser Leu Lys Pro Asp Leu
            260                 265
```

<210> 1301
<211> 490
<212>Amino acid
<213> Homo sapiens

<400> 1301

```
Ala Ala Ala Ala Ala Gly Arg Gly Arg Ser Ser Gly Arg Arg Arg Arg
  1               5                  10                  15
Arg Arg Pro Gly Ala Leu Phe Ala Ser Leu Gly Val Leu Leu Gly Pro
             20                  25                  30
Arg Pro Pro Pro Gly Ile Pro Arg Thr Arg Ala Cys Ser Met Gly Gly
         35                  40                  45
Val Gly Glu Pro Gly Pro Arg Glu Gly Pro Ala Gln Pro Gly Ala Pro
     50                  55                  60
Leu Pro Thr Phe Cys Trp Glu Gln Ile Arg Ala His Asp Gln Pro Gly
 65                  70                  75                  80
Asp Lys Trp Leu Val Ile Glu Arg Arg Val Tyr Asp Ile Ser Arg Trp
                 85                  90                  95
Ala Gln Arg His Pro Gly Gly Ser Arg Leu Ile Gly His His Gly Ala
            100                 105                 110
Glu Asp Ala Thr Asp Ala Phe Arg Ala Phe His Gln Asp Leu Asn Phe
        115                 120                 125
Val Arg Lys Phe Leu Gln Pro Leu Leu Ile Gly Glu Leu Ala Pro Glu
    130                 135                 140
Glu Pro Ser Gln Asp Gly Pro Leu Asn Ala Gln Leu Val Glu Asp Phe
145                 150                 155                 160
Arg Ala Leu His Gln Ala Ala Glu Asp Met Lys Leu Phe Asp Ala Ser
                165                 170                 175
Pro Thr Phe Phe Ala Phe Leu Leu Gly His Ile Leu Ala Met Glu Val
            180                 185                 190
Leu Ala Trp Leu Leu Ile Tyr Leu Leu Gly Pro Gly Trp Val Pro Ser
        195                 200                 205
Ala Leu Ala Ala Phe Ile Leu Ala Ile Ser Gln Ala Gln Ser Trp Cys
    210                 215                 220
Leu Gln His Asp Leu Gly His Ala Ser Ile Phe Lys Lys Ser Trp Trp
225                 230                 235                 240
Asn His Val Ala Gln Lys Phe Val Met Gly Gln Leu Lys Gly Phe Ser
                245                 250                 255
Ala His Trp Trp Asn Phe Arg His Phe Gln His His Ala Lys Pro Asn
            260                 265                 270
Ile Phe His Lys Asp Pro Asp Val Thr Val Ala Pro Val Phe Leu Leu
        275                 280                 285
Gly Glu Ser Ser Val Glu Tyr Gly Lys Lys Lys Arg Arg Tyr Leu Pro
    290                 295                 300
Tyr Asn Gln Gln His Leu Tyr Phe Phe Leu Ile Gly Pro Pro Leu Leu
305                 310                 315                 320
Thr Leu Val Asn Phe Glu Val Glu Asn Leu Ala Tyr Met Leu Val Cys
                325                 330                 335
Met Gln Trp Ala Asp Leu Leu Trp Ala Ala Ser Phe Tyr Ala Arg Phe
            340                 345                 350
Phe Leu Ser Tyr Leu Pro Phe Tyr Gly Val Pro Gly Val Leu Leu Phe
        355                 360                 365
Phe Val Ala Val Arg Val Leu Glu Ser His Trp Phe Val Trp Ile Thr
    370                 375                 380
Gln Met Asn His Ile Pro Lys Glu Ile Gly His Glu Lys His Arg Asp
```

```
385                 390                 395                 400
Trp Val Ser Ser Gln Leu Ala Ala Thr Cys Asn Val Glu Pro Ser Leu
                405                 410                 415
Phe Thr Asn Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu His His
            420                 425                 430
Leu Phe Pro Arg Met Pro Arg His Asn Tyr Ser Arg Val Ala Pro Leu
        435                 440                 445
Val Lys Ser Leu Cys Ala Lys His Gly Leu Ser Tyr Glu Val Lys Pro
    450                 455                 460
Phe Leu Thr Ala Leu Val Asp Ile Val Arg Ser Leu Lys Lys Ser Gly
465                 470                 475                 480
Asp Ile Trp Leu Asp Ala Tyr Leu His Gln
                485                 490
```

<210> 1302
<211> 110
<212>Amino acid
<213> Homo sapiens

<400> 1302

```
Lys Ser Arg Ala Thr Arg Leu Arg Glu Ser Ala Glu Met Thr Gly Phe
  1               5                  10                  15
Leu Leu Pro Pro Ala Ser Arg Gly Thr Arg Arg Ser Cys Ser Arg Ser
            20                  25                  30
Arg Lys Arg Gln Thr Arg Arg Arg Arg Asn Pro Ser Ser Phe Val Ala
        35                  40                  45
Ser Cys Pro Thr Leu Leu Pro Phe Ala Cys Val Pro Gly Ala Ser Pro
    50                  55                  60
Thr Thr Leu Ala Phe Pro Pro Val Val Leu Thr Gly Pro Ser Thr Asp
65                  70                  75                  80
Gly Ile Pro Phe Ala Leu Ser Leu Gln Arg Val Pro Phe Val Leu Pro
                85                  90                  95
Ser Pro Gln Val Ala Ser Leu Pro Leu Gly His Ser Arg Gly
            100                 105                 110
```

<210> 1303
<211> 138
<212>Amino acid
<213> Homo sapiens

<400> 1303

```
Ile Gln Tyr Arg Ser Asp Leu Glu Leu His Ser Ile Thr Met Lys Lys
  1               5                  10                  15
Ser Gly Val Leu Phe Leu Leu Gly Ile Ile Leu Leu Val Leu Ile Gly
            20                  25                  30
Val Gln Gly Thr Pro Val Val Arg Lys Gly Arg Cys Ser Cys Ile Ser
        35                  40                  45
Thr Asn Gln Gly Thr Ile His Leu Gln Ser Leu Lys Asp Leu Lys Gln
    50                  55                  60
Phe Ala Pro Ser Pro Ser Cys Glu Lys Ile Glu Ile Ile Ala Thr Leu
65                  70                  75                  80
Lys Asn Gly Val Gln Thr Cys Leu Asn Pro Asp Ser Ala Asp Val Lys
                85                  90                  95
Glu Leu Ile Lys Lys Trp Glu Lys Gln Val Ser Gln Lys Lys Lys Gln
```

```
            100                 105                 110
Lys Asn Gly Lys Lys His Gln Lys Lys Lys Val Leu Lys Val Arg Lys
        115                 120                 125
Ser Gln Arg Ser Arg Gln Lys Lys Thr Thr
    130                 135         138
```

<210> 1304
<211> 1000
<212>Amino acid
<213> Homo sapiens

<400> 1304

```
Ile Pro Gly Ser Thr Ile Ser Cys Arg Gly Cys Cys Gly Lys Trp Pro
  1               5                  10                  15
Val Gln Glu Ala Asp Pro Pro Arg Ala Ala Leu Arg Gly Arg Phe Pro
             20                  25                  30
Ala Leu Leu Thr Arg His Cys Pro Ser Pro Arg Ala Glu Lys Glu Lys
         35                  40                  45
Arg Ser Leu Arg Arg Cys Gly Cys Arg Pro Leu Leu Val Glu Leu Ala
     50                  55                  60
Gly Pro Ala Gly Gln Ala Val Glu Val Leu Pro His Phe Glu Ser Leu
 65                  70                  75                  80
Gly Lys Gln Glu Lys Ile Pro Asn Lys Met Ser Ala Phe Arg Asn His
                 85                  90                  95
Cys Pro His Leu Asp Ser Val Gly Glu Ile Thr Lys Glu Asp Leu Ile
            100                 105                 110
Gln Lys Ser Leu Gly Thr Cys Gln Asp Cys Lys Val Gln Gly Pro Asn
        115                 120                 125
Leu Trp Ala Cys Leu Glu Asn Arg Cys Ser Tyr Val Gly Cys Gly Glu
    130                 135                 140
Ser Gln Val Asp His Ser Thr Ile His Ser Gln Glu Thr Lys His Tyr
145                 150                 155                 160
Leu Thr Val Asn Leu Thr Thr Leu Arg Val Trp Cys Tyr Ala Cys Ser
                165                 170                 175
Lys Glu Val Phe Leu Asp Arg Lys Leu Gly Thr Gln Pro Ser Leu Pro
            180                 185                 190
His Val Arg Gln Pro His Gln Ile Gln Glu Asn Ser Val Gln Asp Phe
        195                 200                 205
Lys Ile Pro Ser Asn Thr Thr Leu Lys Thr Pro Leu Val Ala Val Phe
    210                 215                 220
Asp Asp Leu Asp Ile Glu Ala Asp Glu Glu Asp Glu Leu Arg Ala Arg
225                 230                 235                 240
Gly Leu Thr Gly Leu Lys Asn Ile Gly Asn Thr Cys Tyr Met Asn Ala
                245                 250                 255
Ala Leu Gln Ala Leu Ser Asn Cys Pro Pro Leu Thr Gln Phe Phe Leu
            260                 265                 270
Asp Cys Gly Gly Leu Ala Arg Thr Asp Lys Lys Pro Ala Ile Cys Lys
        275                 280                 285
Ser Tyr Leu Lys Leu Met Thr Glu Leu Trp Tyr Lys Ser Arg Pro Gly
    290                 295                 300
Ser Val Val Pro Thr Thr Leu Phe Gln Gly Ile Lys Thr Val Asn Pro
305                 310                 315                 320
Thr Phe Arg Gly Tyr Ser Gln Gln Asp Ala Gln Glu Phe Leu Arg Cys
                325                 330                 335
Leu Met Asp Leu Leu His Glu Glu Leu Lys Glu Gln Val Met Glu Val
            340                 345                 350
Glu Glu Asp Pro Gln Thr Ile Thr Thr Glu Glu Thr Met Glu Glu Asp
        355                 360                 365
Lys Ser Gln Ser Asp Val Asp Phe Gln Ser Cys Glu Ser Cys Ser Asn
```

```
    370                 375                 380
Ser Asp Arg Ala Glu Asn Glu Asn Gly Ser Arg Cys Phe Ser Glu Asp
385                 390                 395                 400
Asn Asn Glu Thr Thr Met Leu Ile Gln Asp Asp Glu Asn Asn Ser Glu
                405                 410                 415
Met Ser Lys Asp Trp Gln Lys Glu Lys Met Cys Asn Lys Ile Asn Lys
            420                 425                 430
Val Asn Ser Glu Gly Glu Phe Asp Lys Asp Arg Asp Ser Ile Ser Glu
        435                 440                 445
Thr Val Asp Leu Asn Asn Gln Glu Thr Val Lys Val Gln Ile His Ser
    450                 455                 460
Arg Ala Ser Glu Tyr Ile Thr Asp Val His Ser Asn Asp Leu Ser Thr
465                 470                 475                 480
Pro Gln Ile Leu Pro Ser Asn Glu Gly Val Asn Pro Arg Leu Ser Ala
                485                 490                 495
Ser Pro Pro Lys Ser Gly Asn Leu Trp Pro Gly Leu Ala Pro Pro His
            500                 505                 510
Lys Lys Ala Gln Ser Ala Ser Pro Lys Arg Lys Lys Gln His Lys Lys
        515                 520                 525
Tyr Arg Ser Val Ile Ser Asp Ile Phe Asp Gly Thr Ile Ile Ser Ser
    530                 535                 540
Val Gln Cys Leu Thr Cys Asp Arg Val Ser Val Thr Leu Glu Thr Phe
545                 550                 555                 560
Gln Asp Leu Ser Leu Pro Ile Pro Gly Lys Glu Asp Leu Ala Lys Leu
                565                 570                 575
His Ser Ser Ser His Pro Thr Ser Ile Val Lys Ala Gly Ser Cys Gly
            580                 585                 590
Glu Ala Tyr Ala Pro Gln Gly Trp Ile Ala Phe Phe Met Glu Tyr Val
        595                 600                 605
Lys Arg Phe Val Val Ser Cys Val Pro Ser Trp Phe Trp Gly Pro Val
    610                 615                 620
Val Thr Leu Gln Asp Cys Leu Ala Ala Phe Phe Ala Arg Asp Glu Leu
625                 630                 635                 640
Lys Gly Asp Asn Met Tyr Ser Cys Glu Lys Cys Lys Lys Leu Arg Asn
                645                 650                 655
Gly Val Lys Phe Cys Lys Val Gln Asn Phe Pro Glu Ile Leu Cys Ile
            660                 665                 670
His Leu Lys Arg Phe Arg His Glu Leu Met Phe Ser Thr Lys Ile Ser
        675                 680                 685
Thr His Val Ser Phe Pro Leu Glu Gly Leu Asp Leu Gln Pro Phe Leu
    690                 695                 700
Ala Lys Asp Ser Pro Ala Gln Ile Val Thr Tyr Asp Leu Leu Ser Val
705                 710                 715                 720
Ile Cys His His Gly Thr Ala Ser Ser Gly His Tyr Ile Ala Tyr Cys
                725                 730                 735
Arg Asn Asn Leu Asn Asn Leu Trp Tyr Glu Phe Asp Asp Gln Ser Val
            740                 745                 750
Thr Glu Val Ser Glu Ser Thr Val Gln Asn Ala Glu Ala Tyr Val Leu
        755                 760                 765
Phe Tyr Arg Lys Ser Ser Glu Glu Ala Gln Lys Glu Arg Arg Arg Ile
    770                 775                 780
Ser Asn Leu Leu Asn Ile Met Glu Pro Ser Leu Leu Gln Phe Tyr Ile
785                 790                 795                 800
Ser Arg Gln Trp Leu Asn Lys Phe Lys Thr Phe Ala Glu Pro Gly Pro
                805                 810                 815
Ile Ser Asn Asn Asp Phe Leu Cys Ile His Gly Gly Val Pro Pro Arg
            820                 825                 830
Lys Ala Gly Tyr Ile Glu Asp Leu Val Leu Met Leu Pro Gln Asn Ile
        835                 840                 845
Trp Asp Asn Leu Tyr Ser Arg Tyr Gly Gly Gly Pro Ala Val Asn His
    850                 855                 860
Leu Tyr Ile Cys His Thr Cys Gln Ile Glu Ala Glu Lys Ile Glu Lys
865                 870                 875                 880
Arg Arg Lys Thr Glu Leu Glu Ile Phe Ile Arg Leu Asn Arg Ala Phe
```

```
                885                 890                 895
Gln Lys Glu Asp Ser Pro Ala Thr Phe Tyr Cys Ile Ser Met Gln Trp
            900                 905                 910
Phe Arg Glu Trp Glu Ser Phe Val Lys Gly Lys Asp Gly Asp Pro Pro
        915                 920                 925
Gly Pro Ile Asp Asn Thr Lys Ile Ala Val Thr Lys Cys Gly Asn Val
    930                 935                 940
Met Leu Arg Gln Gly Ala Asp Ser Gly Gln Ile Ser Glu Glu Thr Trp
945                 950                 955                 960
Asn Phe Leu Gln Ser Ile Tyr Gly Gly Gly Pro Glu Val Ile Leu Arg
                965                 970                 975
Pro Pro Val Val His Val Asp Pro Asp Ile Leu Gln Ala Glu Glu Lys
            980                 985                 990
Ile Glu Val Glu Thr Arg Ser Leu
        995                1000
```

<210> 1305
<211> 141
<212>Amino acid
<213> Homo sapiens

<400> 1305

```
Ser Pro Ser Ala Ala Gly Gly Leu Ala Trp Val Ser Leu Ala Leu Gly
  1               5                  10                  15
Ser Gly Ser Arg Gly Arg Asp His Ser Gly Ser Gly Val Gly Thr Ala
             20                  25                  30
Met Ala Gly Ala Leu Val Arg Lys Ala Ala Asp Tyr Val Arg Ser Lys
         35                  40                  45
Asp Phe Arg Asp Tyr Leu Met Ser Thr His Phe Trp Gly Pro Val Ala
     50                  55                  60
Asn Trp Gly Leu Pro Ile Ala Ala Ile Asn Asp Met Lys Lys Ser Pro
 65                  70                  75                  80
Glu Ile Ile Ser Gly Arg Met Thr Phe Ala Leu Cys Cys Tyr Ser Leu
                 85                  90                  95
Thr Phe Met Arg Phe Ala Tyr Lys Val Gln Pro Arg Asn Trp Leu Leu
            100                 105                 110
Phe Ala Cys His Ala Thr Asn Glu Val Ala Gln Leu Ile Gln Gly Gly
        115                 120                 125
Arg Leu Ile Lys His Glu Met Thr Lys Thr Ala Ser Ala
    130                 135                 140 141
```

<210> 1306
<211> 386
<212>Amino acid
<213> Homo sapiens

<400> 1306

```
Leu Gly Ser Arg Gln Ala Ala Gly Thr Met Arg Gly Gln Arg Ser Leu
  1               5                  10                  15
Leu Leu Gly Pro Ala Arg Leu Cys Leu Arg Leu Leu Leu Leu Leu Gly
             20                  25                  30
Tyr Arg Arg Arg Cys Pro Pro Leu Leu Arg Gly Leu Val Gln Arg Trp
         35                  40                  45
Arg Tyr Gly Lys Val Cys Leu Arg Ser Leu Leu Tyr Asn Ser Phe Gly
```

```
     50                  55                  60
Gly Ser Asp Thr Ala Val Asp Ala Ala Phe Glu Pro Val Tyr Trp Leu
 65                  70                  75                  80
Val Asp Asn Val Ile Arg Trp Phe Gly Val Val Phe Val Val Leu Val
                 85                  90                  95
Ile Val Leu Thr Gly Ser Ile Val Ala Ile Ala Tyr Leu Cys Val Leu
            100                 105                 110
Pro Leu Ile Leu Arg Thr Tyr Ser Val Pro Arg Leu Cys Trp His Phe
        115                 120                 125
Phe Tyr Ser His Trp Asn Leu Ile Leu Ile Val Phe His Tyr Tyr Gln
    130                 135                 140
Ala Ile Thr Thr Pro Pro Gly Tyr Pro Pro Gln Gly Arg Asn Asp Ile
145                 150                 155                 160
Ala Thr Val Ser Ile Cys Lys Lys Cys Ile Tyr Pro Lys Pro Ala Arg
                165                 170                 175
Thr His His Cys Ser Ile Cys Asn Arg Cys Val Leu Lys Met Asp His
            180                 185                 190
His Cys Pro Trp Leu Asn Asn Cys Val Gly His Tyr Asn His Arg Tyr
        195                 200                 205
Phe Phe Ser Phe Cys Phe Phe Met Thr Leu Gly Cys Val Tyr Cys Ser
    210                 215                 220
Tyr Gly Ser Trp Asp Leu Phe Arg Glu Ala Tyr Ala Ala Ile Glu Lys
225                 230                 235                 240
Met Lys Gln Leu Asp Lys Asn Lys Leu Gln Ala Val Ala Asn Gln Thr
                245                 250                 255
Tyr His Gln Thr Pro Pro Pro Thr Phe Ser Phe Arg Glu Arg Met Thr
            260                 265                 270
His Lys Ser Leu Val Tyr Leu Trp Phe Leu Cys Ser Ser Val Ala Leu
        275                 280                 285
Ala Leu Gly Ala Leu Thr Val Trp His Ala Val Leu Ile Ser Arg Gly
    290                 295                 300
Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys Glu Arg Arg Arg Leu
305                 310                 315                 320
Gln Ala Lys Gly Arg Val Phe Arg Asn Pro Tyr Asn Tyr Gly Cys Leu
                325                 330                 335
Asp Asn Trp Lys Val Phe Leu Gly Val Asp Thr Gly Arg His Trp Leu
            340                 345                 350
Thr Arg Val Leu Leu Pro Ser Ser His Leu Pro His Gly Asn Gly Met
        355                 360                 365
Ser Trp Glu Pro Pro Pro Trp Val Thr Ala His Ser Ala Ser Val Met
    370                 375                 380
Ala Val
385 386
```

<210> 1307
<211> 298
<212>Amino acid
<213> Homo sapiens

<400> 1307

```
Ala Thr Arg Arg Arg Ala Ala Glu Ala Gly Met Ala Ala Val Leu Gln
  1               5                  10                  15
Arg Val Glu Arg Leu Ser Asn Arg Val Val Arg Val Leu Gly Cys Asn
            20                  25                  30
Pro Gly Pro Met Thr Leu Gln Gly Thr Asn Thr Tyr Leu Val Gly Thr
        35                  40                  45
Gly Pro Arg Arg Ile Leu Ile Asp Thr Gly Glu Pro Ala Ile Pro Glu
    50                  55                  60
Tyr Ile Ser Cys Leu Lys Gln Ala Leu Thr Glu Phe Asn Thr Ala Ile
```

```
 65                  70                  75                  80
Gln Glu Ile Val Val Thr His Trp His Arg Asp His Ser Gly Gly Ile
                 85                  90                  95
Gly Asp Ile Cys Lys Ser Ile Asn Asn Asp Thr Thr Tyr Cys Ile Lys
            100                 105                 110
Lys Leu Pro Arg Asn Pro Gln Arg Glu Glu Ile Ile Gly Asn Gly Glu
        115                 120                 125
Gln Gln Tyr Val Tyr Leu Lys Asp Gly Asp Val Ile Lys Thr Glu Gly
    130                 135                 140
Ala Thr Leu Arg Val Leu Tyr Thr Pro Gly His Thr Asp Asp His Met
145                 150                 155                 160
Ala Leu Leu Leu Glu Glu Glu Asn Ala Ile Phe Ser Gly Asp Cys Ile
                165                 170                 175
Leu Gly Glu Gly Thr Thr Val Phe Glu Asp Leu Tyr Asp Tyr Met Asn
            180                 185                 190
Ser Leu Lys Glu Leu Leu Lys Ile Lys Ala Asp Ile Ile Tyr Pro Gly
        195                 200                 205
His Gly Pro Val Ile His Asn Ala Glu Ala Lys Ile Gln Gln Tyr Ile
    210                 215                 220
Ser His Arg Asn Ile Arg Glu Gln Gln Ile Leu Thr Leu Phe Arg Glu
225                 230                 235                 240
Asn Phe Glu Lys Ser Phe Thr Val Met Glu Leu Val Lys Ile Ile Tyr
                245                 250                 255
Lys Asn Thr Pro Glu Asn Leu His Glu Met Ala Lys His Asn Leu Leu
            260                 265                 270
Leu His Leu Lys Lys Leu Glu Lys Glu Gly Lys Ile Phe Ser Asn Thr
        275                 280                 285
Asp Pro Asp Lys Lys Trp Lys Ala His Leu
    290                 295         298
```

<210> 1308
<211> 306
<212>Amino acid
<213> Homo sapiens

<400> 1308

```
Glu Leu His Arg Ala Gly Gln Val Ala Gly Gly Ala Arg Arg Ser Arg
  1               5                  10                  15
Arg Glu Ser Met Glu Leu Glu Arg Ile Val Ser Ala Ala Leu Leu Ala
             20                  25                  30
Phe Val Gln Thr His Leu Pro Glu Ala Asp Leu Ser Gly Leu Asp Glu
         35                  40                  45
Val Ile Phe Ser Tyr Val Leu Gly Val Leu Glu Asp Leu Gly Pro Ser
     50                  55                  60
Gly Pro Ser Glu Glu Asn Phe Asp Met Glu Ala Phe Thr Glu Met Met
 65                  70                  75                  80
Glu Ala Tyr Val Pro Gly Phe Ala His Ile Pro Arg Gly Thr Ile Gly
                 85                  90                  95
Asp Met Met Gln Lys Leu Ser Gly Gln Leu Ser Asp Ala Arg Asn Lys
            100                 105                 110
Glu Asn Leu Gln Pro Gln Ser Ser Gly Val Gln Gly Gln Val Pro Ile
        115                 120                 125
Ser Pro Glu Pro Leu Gln Arg Pro Glu Met Leu Lys Glu Glu Thr Arg
    130                 135                 140
Ser Ser Ala Ala Ala Ala Ala Asp Thr Gln Asp Glu Ala Thr Gly Ala
145                 150                 155                 160
Glu Glu Glu Leu Leu Pro Gly Val Asp Val Leu Leu Glu Val Phe Pro
                165                 170                 175
Thr Cys Ser Val Glu Gln Ala Gln Trp Val Leu Ala Lys Ala Arg Gly
```

```
            180                 185                 190
Asp Leu Glu Glu Ala Val Gln Met Leu Val Glu Gly Lys Glu Glu Gly
        195                 200                 205
Pro Ala Ala Trp Glu Gly Pro Asn Gln Asp Leu Pro Arg Arg Leu Arg
    210                 215                 220
Gly Pro Gln Lys Asp Glu Leu Lys Ser Phe Ile Leu Gln Lys Tyr Met
225                 230                 235                 240
Met Val Asp Ser Ala Glu Asp Gln Lys Ile His Arg Pro Met Ala Pro
                245                 250                 255
Lys Glu Ala Pro Lys Lys Leu Ile Arg Tyr Ile Asp Asn Gln Val Val
            260                 265                 270
Ser Thr Lys Gly Glu Arg Phe Lys Asp Val Arg Asn Pro Glu Ala Glu
        275                 280                 285
Glu Met Lys Ala Thr Tyr Ile Asn Leu Lys Pro Ala Arg Lys Tyr Arg
    290                 295                 300
Phe His
305 306
```

<210> 1309
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1309

```
Phe Ile Thr Gly Lys Gly Ile Val Ala Ile Leu Arg Cys Leu Gln Phe
  1                 5                  10                  15
Asn Glu Thr Leu Thr Glu Leu Arg Phe His Asn Gln Arg His Met Leu
             20                  25                  30
Gly His His Ala Glu Met Glu Ile Ala Arg Leu Leu Lys Ala Asn Asn
         35                  40                  45
Thr Leu Leu Lys Met Gly Tyr His Phe Glu Leu Pro Gly Pro Arg Met
     50                  55                  60
Val Val Thr Asn Leu Leu Thr Arg Asn Gln Asp Lys Gln Arg Gln Lys
 65                  70                  75                  80
Arg Gln Glu Glu Gln Lys Gln Gln Gln Leu Lys Glu Gln Lys Lys Leu
                 85                  90                  95
Ile Ala Met Leu Glu Asn Gly Leu Gly Leu Pro Pro Gly Met Trp Glu
            100                 105                 110
Leu Leu Gly Gly Pro Lys Pro Asp Ser Arg Met Gln Glu Phe Phe Gln
        115                 120                 125
Pro Pro Pro Pro Arg Pro Pro Asn Pro Gln Asn Val Pro Phe Ser Gln
    130                 135                 140
Arg Ser Glu Met Met Lys Lys Pro Ser Gln Ala Pro Lys Tyr Arg Thr
145                 150                 155                 160
Asp Pro Asp Ser Phe Arg Val Val Lys Leu Lys Arg Ile Gln
                165                 170             174
```

<210> 1310
<211> 616
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(616)
<223> X = any amino acid or stop code

<400> 1310

```
Gly Gly Arg Ala Gly Thr Gln Cys Cys Trp Arg Ala Gly Ala Arg Leu
 1               5                  10                  15
Arg Gly Ile Ser Pro Ser Pro Ala Leu Pro Glu Ala Pro Gly Leu Cys
            20                  25                  30
Arg Val Arg Ala Gly Leu Gly Ala Gly Ala Leu Gly Arg Ser Pro Ala
        35                  40                  45
Gly Arg Arg Arg Arg Gly Pro Arg Val Ser Ser Ser Pro Ala Pro His
    50                  55                  60
Pro Arg Arg Val Leu Cys Arg Cys Leu Leu Phe Leu Phe Phe Ser Cys
65                  70                  75                  80
His Asp Arg Arg Gly Asp Ser Gln Pro Tyr Gln Ala Leu Lys Tyr Ser
                85                  90                  95
Ser Lys Ser His Pro Ser Ser Gly Asp His Arg His Glu Lys Met Arg
            100                 105                 110
Asp Ala Gly Asp Pro Ser Pro Pro Asn Lys Met Leu Arg Arg Ser Asp
        115                 120                 125
Ser Pro Glu Asn Lys Tyr Ser Asp Ser Thr Gly His Ser Lys Ala Lys
    130                 135                 140
Asn Val His Thr His Arg Val Arg Glu Arg Asp Gly Gly Thr Ser Tyr
145                 150                 155                 160
Ser Pro Gln Glu Asn Ser His Asn His Ser Ala Leu His Ser Ser Asn
                165                 170                 175
Phe Thr Phe Phe Leu Ile Pro Ser Asn Xaa Pro Gln Gly Lys Thr Phe
            180                 185                 190
Arg Ile Ala Pro Tyr Asp Ser Ala Asp Asp Trp Ser Leu Glu His Ile
        195                 200                 205
Ser Ser Ser Gly Glu Lys Tyr Tyr Tyr Asn Cys Arg Thr Glu Val Ser
    210                 215                 220
Gln Trp Gly Lys Thr Pro Lys Ser Gly Leu Glu Arg Gly Gln Arg Gln
225                 230                 235                 240
Lys Glu Ala Asn Lys Met Ala Val Asn Ser Phe Pro Lys Asp Arg Asp
                245                 250                 255
Tyr Arg Arg Glu Val Met Gln Ala Thr Ala Thr Ser Gly Phe Ala Ser
            260                 265                 270
Gly Lys Ser Thr Ser Gly Asp Lys Pro Val Ser His Ser Cys Thr Thr
        275                 280                 285
Pro Ser Thr Ser Ser Ala Ser Gly Leu Asn Pro Thr Ser Ala Pro Pro
    290                 295                 300
Thr Ser Ala Ser Ala Val Pro Val Ser Pro Val Pro Gln Ser Pro Ile
305                 310                 315                 320
Pro Pro Leu Leu Gln Asp Pro Asn Leu Leu Arg Gln Leu Leu Pro Ala
                325                 330                 335
Leu Glu Ala Thr Leu Gln Leu Asn Asn Ser Asn Val Asp Ile Ser Ile
            340                 345                 350
Ile Asn Glu Val Leu Thr Gly Asp Val Thr Gln Ala Ser Leu Gln Thr
        355                 360                 365
Ile Ile His Lys Cys Leu Thr Ala Gly Pro Ser Val Phe Lys Ile Thr
    370                 375                 380
Ser Leu Ile Ser Gln Ala Ala Gln Leu Ser Thr Gln Ala Gln Ala Ser
385                 390                 395                 400
Asn Gln Ser Pro Met Ser Leu Thr Ser Asp Ala Ser Ser Pro Arg Ser
                405                 410                 415
Tyr Val Ser Pro Arg Asn Lys Ala His Leu Lys Leu Asn Thr Val Pro
            420                 425                 430
Ile Gln Thr Phe Gly Phe Ser Thr Pro Pro Val Ser Ser Gln Pro Lys
        435                 440                 445
Val Ser Thr Pro Val Val Lys Gln Gly Pro Val Ser Gln Ser Ala Thr
    450                 455                 460
Gln Gln Pro Val Thr Ala Asp Lys Gln Gln Gly His Glu Pro Val Ser
465                 470                 475                 480
```

```
Pro Arg Ser Leu Gln Arg Ser Ser Ser Gln Arg Ser Pro Ser Pro Gly
                485                 490                 495
Pro Asn His Thr Ser Asn Ser Ser Asn Ala Ser Asn Ala Thr Val Val
            500                 505                 510
Pro Gln Asn Ser Ser Ala Arg Ser Thr Cys Ser Leu Thr Pro Ala Leu
        515                 520                 525
Ala Ala His Phe Ser Glu Asn Leu Ile Lys His Val Gln Gly Trp Pro
    530                 535                 540
Ala Asp His Ala Glu Lys Gln Ala Ser Arg Leu Arg Glu Glu Ala His
545                 550                 555                 560
Asn Met Gly Thr Ile His Met Ser Glu Ile Cys Thr Glu Leu Lys Asn
                565                 570                 575
Leu Arg Ser Leu Val Arg Val Cys Glu Ile Gln Ala Thr Leu Arg Glu
            580                 585                 590
Gln Arg Ile Leu Phe Leu Arg Gln Gln Ile Lys Glu Leu Glu Lys Leu
        595                 600                 605
Lys Asn Gln Asn Ser Phe Met Val
    610                 615 616
```

<210> 1311
<211> 387
<212>Amino acid
<213> Homo sapiens

<400> 1311

```
Val Ala Pro Glu Cys Arg Gly Ala Tyr Pro Phe Arg Ala Met Met Pro
 1               5                  10                  15
Gly Thr Ala Leu Lys Ala Val Leu Leu Ala Val Leu Leu Val Gly Leu
            20                  25                  30
Gln Thr Ala Thr Gly Arg Leu Leu Ser Gly Gln Pro Val Cys Arg Gly
        35                  40                  45
Gly Thr Gln Arg Pro Cys Tyr Lys Val Ile Tyr Phe His Asp Thr Ser
    50                  55                  60
Arg Arg Leu Asn Phe Glu Glu Ala Lys Glu Ala Cys Arg Arg Asp Gly
65                  70                  75                  80
Gly Gln Leu Val Ser Ile Glu Ser Glu Asp Glu Gln Lys Leu Ile Glu
                85                  90                  95
Lys Phe Ile Glu Asn Leu Leu Pro Ser Asp Gly Asp Phe Trp Ile Gly
            100                 105                 110
Leu Arg Arg Arg Glu Glu Lys Gln Ser Asn Ser Thr Ala Cys Gln Asp
        115                 120                 125
Leu Tyr Ala Trp Thr Asp Gly Ser Ile Ser Gln Phe Arg Asn Trp Tyr
    130                 135                 140
Val Asp Glu Pro Ser Cys Gly Ser Glu Val Cys Val Val Met Tyr His
145                 150                 155                 160
Gln Pro Ser Ala Pro Ala Gly Ile Gly Gly Pro Tyr Met Phe Gln Trp
                165                 170                 175
Asn Asp Asp Arg Cys Asn Met Lys Asn Asn Phe Ile Cys Lys Tyr Ser
            180                 185                 190
Asp Glu Lys Pro Ala Val Pro Ser Arg Glu Ala Glu Gly Glu Glu Thr
        195                 200                 205
Glu Leu Thr Thr Pro Val Leu Pro Glu Glu Thr Gln Glu Glu Asp Ala
    210                 215                 220
Lys Lys Thr Phe Lys Glu Ser Arg Glu Ala Ala Leu Asn Leu Ala Tyr
225                 230                 235                 240
Ile Leu Ile Pro Ser Ile Pro Leu Leu Leu Leu Leu Val Val Thr Thr
                245                 250                 255
Val Val Cys Trp Val Trp Ile Cys Arg Lys Arg Lys Arg Glu Gln Pro
            260                 265                 270
```

```
Asp Pro Ser Thr Lys Lys Gln His Thr Ile Trp Pro Ser Pro His Gln
      275                 280                 285
Gly Asn Ser Pro Asp Leu Glu Val Tyr Asn Val Ile Arg Lys Gln Ser
    290                 295                 300
Glu Ala Asp Leu Ala Glu Thr Arg Pro Asp Leu Lys Asn Ile Ser Phe
305                 310                 315                 320
Arg Val Cys Ser Gly Glu Ala Thr Pro Asp Asp Met Ser Cys Asp Tyr
                325                 330                 335
Asp Asn Met Ala Val Asn Pro Ser Glu Ser Gly Phe Val Thr Leu Val
            340                 345                 350
Ser Val Glu Ser Gly Phe Val Thr Asn Asp Ile Tyr Glu Phe Ser Pro
        355                 360                 365
Asp Gln Met Gly Arg Ser Lys Glu Ser Gly Trp Val Glu Asn Glu Ile
    370                 375                 380
Tyr Gly Tyr
385     387
```

<210> 1312
<211> 470
<212>Amino acid
<213> Homo sapiens

<400> 1312

```
Thr Glu Trp Gly Leu Ser Gly Ser Cys Pro Gly Cys Ser Pro Leu Glu
  1                 5                  10                  15
Pro Gly Ser Arg Gly Arg Gly Ala Ala Ala Trp Arg Ile Leu Arg Cys
             20                  25                  30
Arg Arg Leu Pro Glu Pro Ser Pro Phe Leu Thr Gln Pro Asn Leu Ala
         35                  40                  45
Gln Ser Gln Pro Pro Ala Pro Val Pro Val Thr Asp Pro Ser Val Thr
     50                  55                  60
Met His Pro Ala Val Phe Leu Ser Leu Pro Asp Leu Arg Cys Ser Leu
 65                  70                  75                  80
Leu Leu Leu Val Thr Trp Val Phe Thr Pro Val Thr Thr Glu Ile Thr
                 85                  90                  95
Ser Leu Asp Thr Glu Asn Ile Asp Glu Ile Leu Asn Asn Ala Asp Val
            100                 105                 110
Ala Leu Val Asn Phe Tyr Ala Asp Trp Cys Arg Phe Ser Gln Met Leu
        115                 120                 125
His Pro Ile Phe Glu Glu Ala Ser Asp Val Ile Lys Glu Glu Phe Pro
    130                 135                 140
Asn Glu Asn Gln Val Val Phe Ala Arg Val Asp Cys Asp Gln His Ser
145                 150                 155                 160
Asp Ile Ala Gln Arg Tyr Arg Ile Ser Lys Tyr Pro Thr Leu Lys Leu
                165                 170                 175
Phe Arg Asn Gly Met Met Met Lys Arg Glu Tyr Arg Gly Gln Arg Ser
            180                 185                 190
Val Lys Ala Leu Ala Asp Tyr Ile Arg Gln Gln Lys Ser Asp Pro Ile
        195                 200                 205
Gln Glu Ile Arg Asp Leu Ala Glu Ile Thr Thr Leu Asp Arg Ser Lys
    210                 215                 220
Arg Asn Ile Ile Gly Tyr Phe Glu Gln Lys Asp Ser Asp Asn Tyr Arg
225                 230                 235                 240
Val Phe Glu Arg Val Ala Asn Ile Leu His Asp Asp Cys Ala Phe Leu
                245                 250                 255
Ser Ala Phe Gly Asp Val Ser Lys Pro Glu Arg Tyr Ser Gly Asp Asn
            260                 265                 270
Ile Ile Tyr Lys Pro Pro Gly His Ser Ala Pro Asp Met Val Tyr Leu
        275                 280                 285
```

```
Gly Ala Met Thr Asn Phe Asp Val Thr Tyr Asn Trp Ile Gln Asp Lys
    290                 295                 300
Cys Val Pro Leu Val Arg Glu Ile Thr Phe Glu Asn Gly Glu Glu Leu
305                 310                 315                 320
Thr Glu Glu Gly Leu Pro Phe Leu Ile Leu Phe His Met Lys Glu Asp
                325                 330                 335
Thr Glu Ser Leu Glu Ile Phe Gln Asn Glu Val Ala Arg Gln Leu Ile
            340                 345                 350
Ser Glu Lys Gly Thr Ile Asn Phe Leu His Ala Asp Cys Asp Lys Phe
        355                 360                 365
Arg His Pro Leu Leu His Ile Gln Lys Thr Pro Ala Asp Cys Pro Val
    370                 375                 380
Ile Ala Ile Asp Ser Phe Arg His Met Tyr Val Phe Gly Asp Phe Lys
385                 390                 395                 400
Asp Val Leu Ile Pro Gly Lys Leu Lys Gln Phe Val Phe Asp Leu His
                405                 410                 415
Ser Gly Lys Leu His Arg Glu Phe His His Gly Pro Asp Pro Thr Asp
            420                 425                 430
Thr Ala Pro Gly Glu Gln Ala Gln Asp Val Ala Ser Ser Pro Pro Glu
        435                 440                 445
Ser Ser Phe Gln Lys Leu Ala Pro Ser Glu Tyr Arg Tyr Thr Leu Leu
    450                 455                 460
Arg Asp Arg Asp Glu Leu
465                 470
```

<210> 1313
<211> 262
<212>Amino acid
<213> Homo sapiens

<400> 1313

```
Leu Thr Pro Ser Val Gly Pro Val Phe Pro Gly Arg Pro Thr Arg Pro
  1               5                  10                  15
Leu Ala Ser Pro Phe Pro Val Pro Leu His Arg Cys Ser Ala Gly Ser
             20                  25                  30
Gln Pro Pro Gly Pro Val Pro Glu Gly Leu Ile Arg Ile Tyr Ser Met
         35                  40                  45
Arg Phe Cys Pro Tyr Ser His Arg Thr Arg Leu Val Leu Lys Ala Lys
     50                  55                  60
Asp Ile Arg His Glu Val Val Asn Ile Asn Leu Arg Asn Lys Pro Glu
 65                  70                  75                  80
Trp Tyr Tyr Thr Lys His Pro Phe Gly His Ile Pro Val Leu Glu Thr
                 85                  90                  95
Ser Gln Cys Gln Leu Ile Tyr Glu Ser Val Ile Ala Cys Glu Tyr Leu
            100                 105                 110
Asp Asp Ala Tyr Pro Gly Arg Lys Leu Phe Pro Tyr Asp Pro Tyr Glu
        115                 120                 125
Arg Ala Arg Gln Lys Met Leu Leu Glu Leu Phe Cys Lys Val Pro His
    130                 135                 140
Leu Thr Lys Glu Cys Leu Val Ala Leu Arg Cys Gly Arg Glu Cys Thr
145                 150                 155                 160
Asn Leu Lys Ala Ala Leu Arg Gln Glu Phe Ser Asn Leu Glu Glu Ile
                165                 170                 175
Leu Glu Tyr Gln Asn Thr Thr Phe Phe Gly Gly Thr Cys Ile Ser Met
            180                 185                 190
Ile Asp Tyr Leu Leu Trp Pro Trp Phe Glu Arg Leu Asp Val Tyr Gly
        195                 200                 205
Ile Leu Asp Cys Val Ser His Thr Pro Ala Leu Arg Leu Trp Ile Ser
    210                 215                 220
```

```
Ala Met Lys Trp Asp Pro Thr Val Cys Ala Leu Leu Met Asp Lys Ser
225                 230                 235                 240
Ile Phe Gln Gly Phe Leu Asn Leu Tyr Phe Gln Asn Asn Pro Asn Ala
                245                 250                 255
Phe Asp Phe Gly Leu Cys
            260     262
```

<210> 1314
<211> 173
<212>Amino acid
<213> Homo sapiens

<400> 1314

```
Asn Thr Ala Thr Asn Met Thr Gln Pro Asn Ala Gly Thr Arg Lys Tyr
  1               5                  10                  15
Ser Val Pro Ala Ile Ser Val His Thr Ser Ser Ser Ser Phe Ala Tyr
             20                  25                  30
Asp Arg Glu Phe Leu Arg Thr Leu Pro Gly Phe Leu Ile Val Ala Glu
         35                  40                  45
Ile Val Leu Gly Leu Leu Val Trp Thr Leu Ile Ala Gly Thr Glu Tyr
     50                  55                  60
Phe Arg Val Pro Ala Phe Gly Trp Val Met Phe Val Ala Val Phe Tyr
 65                  70                  75                  80
Trp Val Leu Thr Val Phe Phe Leu Ile Ile Tyr Ile Thr Met Thr Tyr
                85                  90                  95
Thr Arg Ile Pro Gln Val Pro Trp Thr Thr Val Gly Leu Cys Phe Asn
            100                 105                 110
Gly Ser Ala Phe Val Leu Tyr Leu Ser Ala Ala Val Val Asp Ala Ser
        115                 120                 125
Ser Val Ser Pro Glu Arg Asp Ser His Asn Phe Asn Ser Trp Ala Ala
    130                 135                 140
Ser Ser Phe Phe Ala Phe Leu Val Thr Ile Cys Tyr Ala Gly Asn Thr
145                 150                 155                 160
Tyr Phe Ser Phe Ile Ala Trp Arg Ser Arg Thr Ile Gln
                165                 170         173
```

<210> 1315
<211> 259
<212>Amino acid
<213> Homo sapiens

<400> 1315

```
Gly Leu Arg Asp Pro Phe Arg Arg Lys Arg Arg Leu Lys Pro Gln Val
  1               5                  10                  15
Lys Met Ser Asn Tyr Val Asn Asp Met Trp Pro Gly Ser Pro Gln Glu
             20                  25                  30
Lys Asp Ser Pro Ser Thr Ser Arg Ser Gly Gly Ser Ser Arg Leu Ser
         35                  40                  45
Ser Arg Ser Arg Ser Arg Ser Phe Ser Arg Ser Ser Arg Ser His Ser
     50                  55                  60
Arg Val Ser Ser Arg Phe Ser Ser Arg Ser Arg Arg Ser Lys Ser Arg
 65                  70                  75                  80
Ser Arg Ser Arg Arg Arg His Gln Arg Lys Tyr Arg Arg Tyr Ser Arg
                85                  90                  95
```

```
Ser Tyr Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Arg Tyr Arg Glu
            100                 105                 110
Arg Arg Tyr Gly Phe Thr Arg Arg Tyr Tyr Arg Ser Pro Ser Arg Tyr
        115                 120                 125
Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser Arg Gly Arg Ser Tyr Cys
    130                 135                 140
Gly Arg Ala Tyr Ala Ile Ala Arg Gly Gln Arg Tyr Tyr Gly Phe Gly
145                 150                 155                 160
Arg Thr Val Tyr Pro Glu Glu His Ser Arg Trp Arg Asp Arg Ser Arg
                165                 170                 175
Thr Arg Ser Arg Ser Arg Thr Pro Phe Arg Leu Ser Glu Lys Asp Arg
            180                 185                 190
Met Glu Leu Leu Glu Ile Ala Lys Thr Asn Ala Ala Lys Ala Leu Gly
        195                 200                 205
Thr Thr Asn Ile Asp Leu Pro Ala Ser Leu Arg Thr Val Pro Ser Ala
    210                 215                 220
Lys Glu Thr Ser Arg Gly Ile Gly Val Ser Ser Asn Gly Ala Lys Pro
225                 230                 235                 240
Glu Val Ser Ile Leu Gly Leu Ser Glu Gln Asn Phe Gln Lys Ala Asn
                245                 250                 255
Cys Gln Ile
        259
```

<210> 1316
<211> 678
<212>Amino acid
<213> Homo sapiens

<400> 1316

```
Ala Glu Gly Ser Thr Met Asp Leu Thr Lys Met Gly Met Ile Gln Leu
  1               5                  10                  15
Gln Asn Pro Asn His Pro Thr Gly Leu Leu Cys Lys Ala Asn Gln Met
            20                  25                  30
Arg Leu Ala Gly Thr Leu Cys Asp Val Val Ile Met Val Asp Ser Gln
        35                  40                  45
Glu Phe His Ala His Arg Thr Val Leu Ala Cys Thr Ser Lys Met Phe
    50                  55                  60
Glu Ile Leu Phe His Arg Asn Ser Gln His Tyr Thr Leu Asp Phe Leu
65                  70                  75                  80
Ser Pro Lys Thr Phe Gln Gln Ile Leu Glu Tyr Ala Tyr Thr Ala Thr
                85                  90                  95
Leu Gln Ala Lys Ala Glu Asp Leu Asp Asp Leu Leu Tyr Ala Ala Glu
            100                 105                 110
Ile Leu Glu Ile Glu Tyr Leu Glu Glu Gln Cys Leu Lys Met Leu Glu
        115                 120                 125
Thr Ile Gln Ala Ser Asp Asp Asn Asp Thr Glu Ala Thr Met Ala Asp
    130                 135                 140
Gly Gly Ala Glu Glu Lys Lys Asp Arg Lys Ala Arg Tyr Leu Lys Asn
145                 150                 155                 160
Ile Phe Ile Ser Lys His Ser Ser Glu Glu Ser Gly Tyr Ala Ser Val
                165                 170                 175
Ala Gly Gln Ser Leu Pro Gly Pro Met Val Asp Gln Ser Pro Ser Val
            180                 185                 190
Ser Thr Ser Phe Gly Leu Ser Ala Met Ser Pro Thr Lys Ala Ala Val
        195                 200                 205
Asp Ser Leu Met Thr Ile Gly Gln Ser Leu Leu Gln Gly Thr Leu Gln
    210                 215                 220
Pro Pro Ala Gly Pro Glu Glu Pro Thr Leu Ala Gly Gly Gly Arg His
225                 230                 235                 240
```

```
Pro Gly Val Ala Glu Val Lys Thr Glu Met Met Gln Val Asp Glu Val
                245                 250                 255
Pro Ser Gln Asp Ser Pro Gly Ala Ala Glu Ser Ser Ile Ser Gly Gly
            260                 265                 270
Met Gly Asp Lys Val Glu Glu Arg Gly Lys Glu Gly Pro Gly Thr Pro
        275                 280                 285
Thr Arg Ser Ser Val Ile Thr Ser Ala Arg Glu Leu His Tyr Gly Arg
    290                 295                 300
Glu Glu Ser Ala Glu Gln Val Pro Pro Pro Ala Glu Ala Gly Gln Ala
305                 310                 315                 320
Pro Thr Gly Arg Pro Glu His Pro Ala Pro Pro Pro Glu Lys His Leu
                325                 330                 335
Gly Ile Tyr Ser Val Leu Pro Asn His Lys Ala Asp Ala Val Leu Ser
            340                 345                 350
Met Pro Ser Ser Val Thr Ser Gly Leu His Val Gln Pro Ala Leu Ala
        355                 360                 365
Val Ser Met Asp Phe Ser Thr Tyr Gly Gly Leu Leu Pro Gln Gly Phe
    370                 375                 380
Ile Gln Arg Glu Leu Phe Ser Lys Leu Gly Glu Leu Ala Val Gly Met
385                 390                 395                 400
Lys Ser Glu Ser Arg Thr Ile Gly Glu Gln Cys Ser Val Cys Gly Val
                405                 410                 415
Glu Leu Pro Asp Asn Glu Ala Val Glu Gln His Arg Lys Leu His Ser
            420                 425                 430
Gly Met Lys Thr Tyr Gly Cys Glu Leu Cys Gly Lys Arg Phe Leu Asp
        435                 440                 445
Ser Leu Arg Leu Arg Met His Leu Leu Ala His Ser Ala Gly Ala Lys
    450                 455                 460
Ala Phe Val Cys Asp Gln Cys Gly Ala Gln Phe Ser Lys Glu Asp Ala
465                 470                 475                 480
Leu Glu Thr His Arg Gln Thr His Thr Gly Thr Asp Met Ala Val Phe
                485                 490                 495
Cys Leu Leu Cys Gly Lys Arg Phe Gln Ala Gln Ser Ala Leu Gln Gln
            500                 505                 510
His Met Glu Val His Ala Gly Val Arg Ser Tyr Ile Cys Ser Glu Cys
        515                 520                 525
Asn Arg Thr Phe Pro Ser His Thr Ala Leu Lys Arg His Leu Arg Ser
    530                 535                 540
His Thr Gly Asp His Pro Tyr Glu Cys Glu Phe Cys Gly Ser Cys Phe
545                 550                 555                 560
Arg Asp Glu Ser Thr Leu Lys Ser His Lys Arg Ile His Thr Gly Glu
                565                 570                 575
Lys Pro Tyr Glu Cys Asn Gly Cys Gly Lys Lys Phe Ser Leu Lys His
            580                 585                 590
Gln Leu Glu Thr His Tyr Arg Val His Thr Gly Glu Lys Pro Phe Glu
        595                 600                 605
Cys Lys Leu Cys His Gln Arg Ser Arg Asp Tyr Ser Ala Met Ile Lys
    610                 615                 620
His Leu Arg Thr His Asn Gly Ala Ser Pro Tyr Gln Cys Thr Ile Cys
625                 630                 635                 640
Thr Glu Tyr Cys Pro Ser Leu Ser Ser Met Gln Lys His Met Lys Gly
                645                 650                 655
His Lys Pro Glu Glu Ile Pro Pro Asp Trp Arg Ile Glu Lys Thr Tyr
            660                 665                 670
Leu Tyr Leu Cys Tyr Val
        675         678
```

<210> 1317
<211> 74
<212>Amino acid
<213> Homo sapiens

<400> 1317

```
Ile Trp Glu Ala Pro Thr Leu Ile Phe Thr Leu Ala Gly Gly Arg Ala
 1               5                  10                  15
Leu Gly His Pro Pro Met Gln Lys Gly Ser Gln Gly Cys Ala Leu Pro
            20                  25                  30
His Pro Leu Pro Gly Ala Ser Leu Pro Ala Gln Pro Gly Pro Ala Asp
        35                  40                  45
His Arg Gly Trp Glu Cys Arg Ile Gly Gly Glu Ala Ser Val Phe Thr
    50                  55                  60
His Leu Phe Cys Leu Pro His Ser Pro Thr
65                  70                  74
```

<210> 1318
<211> 351
<212>Amino acid
<213> Homo sapiens

<400> 1318

```
Ala Ser Gly Ser Pro Ala Pro Ser Ser Ser Ser Ala Met Ala Ala Ala
 1               5                  10                  15
Cys Gly Pro Gly Ala Ala Gly Tyr Cys Leu Leu Leu Gly Leu His Leu
            20                  25                  30
Phe Leu Leu Thr Ala Gly Pro Ala Leu Gly Trp Asn Asp Pro Asp Arg
        35                  40                  45
Met Leu Leu Arg Asp Val Lys Ala Leu Thr Leu His Tyr Asp Arg Tyr
    50                  55                  60
Thr Thr Ser Arg Arg Leu Asp Pro Ile Pro Gln Leu Lys Cys Val Gly
65                  70                  75                  80
Gly Thr Ala Gly Cys Asp Ser Tyr Thr Pro Lys Val Ile Gln Cys Gln
                85                  90                  95
Asn Lys Gly Trp Asp Gly Tyr Asp Val Gln Trp Glu Cys Lys Thr Asp
            100                 105                 110
Leu Asp Ile Ala Tyr Lys Phe Gly Lys Thr Val Val Ser Cys Glu Gly
        115                 120                 125
Tyr Glu Ser Ser Glu Asp Gln Tyr Val Leu Arg Gly Ser Cys Gly Leu
    130                 135                 140
Glu Tyr Asn Leu Asp Tyr Thr Glu Leu Gly Leu Gln Lys Leu Lys Glu
145                 150                 155                 160
Ser Gly Lys Gln His Gly Phe Ala Ser Phe Ser Asp Tyr Tyr Tyr Lys
                165                 170                 175
Trp Ser Ser Ala Asp Ser Cys Asn Met Ser Gly Leu Ile Thr Ile Val
            180                 185                 190
Val Leu Leu Gly Ile Ala Phe Val Val Tyr Lys Leu Phe Leu Ser Asp
        195                 200                 205
Gly Gln Tyr Ser Pro Pro Pro Tyr Ser Glu Tyr Pro Pro Phe Ser His
    210                 215                 220
Arg Tyr Gln Arg Phe Thr Asn Ser Ala Gly Pro Pro Pro Pro Gly Phe
225                 230                 235                 240
Lys Ser Glu Phe Thr Gly Pro Gln Asn Thr Gly His Gly Ala Thr Ser
                245                 250                 255
Gly Phe Gly Ser Ala Phe Thr Gly Gln Gln Gly Tyr Glu Asn Ser Gly
            260                 265                 270
Pro Gly Phe Trp Thr Gly Leu Gly Thr Gly Gly Ile Leu Gly Tyr Leu
        275                 280                 285
Phe Gly Ser Asn Arg Ala Ala Thr Pro Phe Ser Asp Ser Trp Tyr Tyr
    290                 295                 300
```

```
Pro Ser Tyr Pro Pro Ser Tyr Pro Gly Thr Trp Asn Arg Ala Tyr Ser
305                 310                 315                 320
Pro Leu His Gly Gly Ser Gly Ser Tyr Ser Val Cys Ser Asn Ser Asp
                325                 330                 335
Thr Lys Thr Arg Thr Ala Ser Gly Tyr Gly Gly Thr Arg Arg Arg
            340                 345                 350 351
```

<210> 1319
<211> 310
<212>Amino acid
<213> Homo sapiens

<400> 1319

```
Gly Arg Cys Gly Ala Met Ala Ala Gly Leu Ala Arg Leu Leu Leu Leu
  1               5                  10                  15
Leu Gly Leu Ser Ala Gly Gly Pro Ala Pro Ala Gly Ala Ala Lys Met
             20                  25                  30
Lys Val Val Glu Glu Pro Asn Ala Phe Gly Val Asn Asn Pro Phe Leu
         35                  40                  45
Pro Gln Ala Ser Arg Leu Gln Ala Lys Arg Asp Pro Ser Pro Val Ser
     50                  55                  60
Gly Pro Val His Leu Phe Arg Leu Ser Gly Lys Cys Phe Ser Leu Val
 65                  70                  75                  80
Glu Ser Thr Tyr Lys Tyr Glu Phe Cys Pro Phe His Asn Val Thr Gln
                 85                  90                  95
His Glu Gln Thr Phe Arg Trp Asn Ala Tyr Ser Gly Ile Leu Gly Ile
            100                 105                 110
Trp His Glu Trp Glu Ile Ala Asn Asn Thr Phe Thr Gly Met Trp Met
        115                 120                 125
Arg Asp Gly Asp Ala Cys Arg Ser Arg Ser Arg Gln Ser Lys Val Glu
    130                 135                 140
Leu Ala Cys Gly Lys Ser Asn Arg Leu Ala His Val Ser Glu Pro Ser
145                 150                 155                 160
Thr Cys Val Tyr Ala Leu Thr Phe Glu Thr Pro Leu Val Cys His Pro
                165                 170                 175
His Ala Leu Leu Val Tyr Pro Thr Leu Pro Glu Ala Leu Gln Arg Gln
            180                 185                 190
Trp Asp Gln Val Glu Gln Asp Leu Ala Asp Glu Leu Ile Thr Pro Gln
        195                 200                 205
Gly His Glu Lys Leu Leu Arg Thr Leu Phe Glu Asp Ala Gly Tyr Leu
    210                 215                 220
Lys Thr Pro Glu Glu Asn Glu Pro Thr Gln Leu Glu Gly Gly Pro Asp
225                 230                 235                 240
Ser Leu Gly Phe Glu Thr Leu Glu Asn Cys Arg Lys Ala His Lys Glu
                245                 250                 255
Leu Ser Lys Glu Ile Lys Arg Leu Lys Gly Leu Leu Thr Gln His Gly
            260                 265                 270
Ile Pro Tyr Thr Arg Pro Thr Glu Thr Ser Asn Leu Glu His Leu Gly
        275                 280                 285
His Glu Thr Pro Arg Ala Lys Ser Pro Glu Gln Leu Arg Gly Asp Pro
    290                 295                 300
Gly Leu Arg Gly Ser Leu
305                 310
```

<210> 1320
<211> 313
<212>Amino acid
<213> Homo sapiens

<400> 1320
Asn Ser Phe Trp Ser Val Leu Phe Leu Val Gln Glu Glu Thr Glu Val
1 5 10 15
Ala Arg Cys Asn Ala Gln His Arg Leu Arg Gln Ser Arg Asp Ser Lys
20 25 30
Pro Asp Pro Ser Phe Arg Ser Gln Pro Ile Asp Ser Ser Ile Ser Phe
35 40 45
Ala Gly Ser Asp Ile Gln Pro Leu Phe Ser Phe Ala Ser Val Asp Gly
50 55 60
Thr Gln Val Gly Glu Ala Glu Glu Trp Ala Gly Pro Trp Ala Glu Ala
65 70 75 80
Thr Leu Leu Pro Gly Pro Gly Asn Arg Trp Pro Pro Arg Ala Gly Leu
85 90 95
Ser Gly Asn Trp Leu Glu Glu Asp Gly Asp Trp Pro Ser Leu Pro Glu
100 105 110
Val Val Gly Phe Val Ser Glu Arg Glu Leu Phe Arg Asp Ala Leu Gly
115 120 125
Ala Gly Cys Arg Ile Leu Leu Ile Cys Glu Met Gln Leu Thr His Gln
130 135 140
Leu Asp Leu Phe Pro Glu Cys Arg Val Thr Leu Leu Leu Phe Lys Asp
145 150 155 160
Val Lys Asn Ala Gly Asp Leu Arg Arg Lys Ala Met Glu Gly Thr Ile
165 170 175
Asp Gly Ser Leu Ile Asn Pro Thr Val Ile Val Asp Pro Phe Gln Ile
180 185 190
Leu Val Ala Ala Asn Lys Ala Val His Leu Tyr Lys Leu Gly Lys Met
195 200 205
Lys Thr Arg Thr Leu Ser Thr Glu Ile Ile Phe Asn Leu Ser Pro Asn
210 215 220
Asn Asn Ile Ser Glu Ala Leu Lys Lys Phe Gly Ile Ser Ala Asn Asp
225 230 235 240
Thr Ser Ile Leu Ile Val Tyr Ile Glu Glu Gly Glu Lys Gln Ile Asn
245 250 255
Gln Glu Tyr Leu Ile Ser Gln Val Glu Gly His Gln Val Ser Leu Lys
260 265 270
Asn Leu Pro Glu Ile Met Asn Ile Thr Glu Val Lys Lys Ile Tyr Lys
275 280 285
Leu Ser Ser Gln Glu Glu Ser Ile Gly Thr Leu Leu Asp Ala Ile Ile
290 295 300
Cys Arg Met Ser Thr Lys Asp Val Leu
305 310 313

<210> 1321
<211> 891
<212>Amino acid
<213> Homo sapiens

<400> 1321
Gln Arg Ser Trp Ala Gly Pro Gly Ala Gly Pro Glu Ala Gly Thr Arg
1 5 10 15
Pro Pro Ala Arg Gly Arg Arg Arg Gln Pro Gly Asn Val Asp Pro Arg
20 25 30
Arg Arg Ala Pro Gln Leu Arg Ser Gln Met Gln Val Ala Met Ala Arg
35 40 45

```
Ala Thr Thr Ala Thr Gly Asn Arg Leu Trp Pro Gly Leu Leu Ile Met
     50                  55                  60
Leu Gly Ser Leu Cys His Arg Gly Ser Pro Cys Gly Leu Ser Thr His
 65                  70                  75                  80
Ile Glu Ile Gly His Arg Ala Leu Glu Phe Leu Gln Leu His Asn Gly
                85                  90                  95
Arg Val Asn Tyr Arg Glu Leu Leu Leu Glu His Gln Asp Ala Tyr Gln
            100                 105                 110
Ala Gly Ile Val Phe Pro Asp Cys Phe Tyr Pro Ser Ile Cys Lys Gly
        115                 120                 125
Gly Lys Phe His Asp Val Ser Glu Ser Thr His Trp Thr Pro Phe Leu
    130                 135                 140
Asn Ala Ser Val His Tyr Ile Arg Glu Asn Tyr Pro Leu Pro Trp Glu
145                 150                 155                 160
Lys Asp Thr Glu Lys Leu Val Ala Phe Leu Phe Gly Ile Thr Ser His
                165                 170                 175
Met Ala Ala Asp Val Ser Trp His Ser Leu Gly Leu Glu Gln Gly Phe
            180                 185                 190
Leu Arg Thr Met Gly Ala Ile Asp Phe His Gly Ser Tyr Ser Glu Ala
        195                 200                 205
His Ser Ala Gly Asp Phe Gly Gly Asp Val Leu Ser Gln Phe Glu Phe
    210                 215                 220
Asn Phe Asn Tyr Leu Ala Arg Arg Trp Tyr Val Pro Val Lys Asp Leu
225                 230                 235                 240
Leu Gly Ile Tyr Glu Lys Leu Tyr Gly Arg Lys Val Ile Thr Glu Asn
                245                 250                 255
Val Ile Val Asp Cys Ser His Ile Gln Phe Leu Glu Met Tyr Gly Glu
            260                 265                 270
Met Leu Ala Val Ser Lys Leu Tyr Pro Thr Tyr Ser Thr Lys Ser Pro
        275                 280                 285
Phe Leu Val Glu Gln Phe Gln Glu Tyr Phe Leu Gly Gly Leu Asp Asp
    290                 295                 300
Met Ala Phe Trp Ser Thr Asn Ile Tyr His Leu Thr Ile Phe Met Leu
305                 310                 315                 320
Glu Asn Gly Thr Ser Asp Cys Asn Leu Pro Glu Asn Pro Leu Phe Ile
                325                 330                 335
Ala Cys Gly Gly Gln Gln Asn His Thr Gln Gly Ser Lys Met Gln Lys
            340                 345                 350
Asn Asp Phe His Arg Asn Leu Thr Thr Ser Leu Thr Glu Ser Val Asp
        355                 360                 365
Arg Asn Ile Asn Tyr Thr Glu Arg Gly Val Phe Phe Ser Val Asn Ser
    370                 375                 380
Trp Thr Pro Asp Ser Met Ser Phe Ile Tyr Lys Ala Leu Glu Arg Asn
385                 390                 395                 400
Ile Arg Thr Met Phe Ile Gly Gly Ser Gln Leu Ser Gln Lys His Val
                405                 410                 415
Ser Ser Pro Leu Ala Ser Tyr Phe Leu Ser Phe Pro Tyr Ala Arg Leu
            420                 425                 430
Gly Trp Ala Met Thr Ser Ala Asp Leu Asn Gln Asp Gly His Gly Asp
        435                 440                 445
Leu Val Val Gly Ala Pro Gly Tyr Ser Arg Pro Gly His Ile His Ile
    450                 455                 460
Gly Arg Val Tyr Leu Ile Tyr Gly Asn Asp Leu Gly Leu Pro Pro Val
465                 470                 475                 480
Asp Leu Asp Leu Asp Lys Glu Ala His Arg Ile Leu Glu Gly Phe Gln
                485                 490                 495
Pro Ser Gly Arg Phe Gly Ser Ala Leu Ala Val Leu Asp Phe Asn Val
            500                 505                 510
Asp Gly Val Pro Asp Leu Ala Val Gly Ala Pro Ser Val Gly Ser Glu
        515                 520                 525
Gln Leu Thr Tyr Lys Gly Ala Val Tyr Val Tyr Phe Gly Ser Lys Gln
    530                 535                 540
Gly Gly Met Ser Ser Ser Pro Asn Ile Thr Ile Ser Cys Gln Asp Ile
545                 550                 555                 560
```

```
Tyr Cys Asn Leu Gly Trp Thr Leu Leu Ala Ala Asp Val Asn Gly Asp
                565                 570                 575
Ser Glu Pro Asp Leu Val Ile Gly Ser Pro Phe Ala Pro Gly Gly Gly
            580                 585                 590
Lys Gln Lys Gly Ile Val Ala Ala Phe Tyr Ser Gly Pro Ser Leu Ser
        595                 600                 605
Asp Lys Glu Lys Leu Asn Val Glu Ala Ala Asn Trp Thr Val Arg Gly
    610                 615                 620
Glu Glu Asp Phe Ser Trp Phe Gly Tyr Ser Leu His Gly Val Thr Val
625                 630                 635                 640
Asp Asn Arg Thr Leu Leu Leu Val Gly Ser Pro Thr Trp Lys Asn Ala
                645                 650                 655
Ser Arg Leu Gly His Leu Leu His Ile Arg Asp Glu Lys Lys Ser Leu
            660                 665                 670
Gly Arg Val Tyr Gly Tyr Phe Pro Pro Asn Gly Gln Ser Trp Phe Thr
        675                 680                 685
Ile Ser Gly Asp Lys Ala Met Gly Lys Leu Gly Thr Ser Leu Ser Ser
    690                 695                 700
Gly His Val Leu Met Asn Gly Thr Leu Lys Gln Val Leu Leu Val Gly
705                 710                 715                 720
Ala Pro Thr Tyr Asp Asp Val Ser Lys Val Ala Phe Leu Thr Val Thr
                725                 730                 735
Leu His Gln Gly Gly Ala Thr Arg Met Tyr Ala Leu Thr Ser Asp Ala
            740                 745                 750
Gln Pro Leu Leu Leu Ser Thr Phe Ser Gly Asp Arg Arg Phe Ser Arg
        755                 760                 765
Phe Gly Gly Val Leu His Leu Ser Asp Leu Asp Asp Asp Gly Leu Asp
    770                 775                 780
Glu Ile Ile Met Ala Ala Pro Leu Arg Ile Ala Asp Val Thr Ser Gly
785                 790                 795                 800
Leu Ile Gly Gly Glu Asp Gly Arg Val Tyr Val Tyr Asn Gly Lys Glu
                805                 810                 815
Thr Thr Leu Gly Asp Met Thr Gly Lys Cys Lys Ser Trp Ile Thr Pro
            820                 825                 830
Cys Pro Glu Glu Lys Ala Gln Tyr Val Leu Ile Ser Pro Glu Ala Ser
        835                 840                 845
Ser Arg Phe Gly Ser Ser Leu Ile Thr Val Arg Ser Lys Ala Lys Asn
    850                 855                 860
Gln Val Val Ile Ala Ala Gly Arg Ser Ser Leu Gly Ala Arg Leu Ser
865                 870                 875                 880
Gly Ala Leu His Val Tyr Ser Leu Gly Ser Asp
                885                 890 891
```

<210> 1322
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 1322

```
Ser Leu Arg Asn Ser Ala Arg Gly Leu Lys Met Ala Ala Ser Ala Ala
  1               5                  10                  15
Arg Gly Ala Ala Ala Leu Arg Arg Ser Ile Asn Gln Pro Val Ala Phe
            20                  25                  30
Val Arg Arg Ile Pro Trp Thr Ala Ala Ser Ser Gln Leu Lys Glu His
        35                  40                  45
Phe Ala Gln Phe Gly His Val Arg Arg Cys Ile Leu Pro Phe Asp Lys
    50                  55                  60
Glu Thr Gly Phe His Arg Gly Leu Gly Trp Val Gln Phe Ser Ser Glu
65                  70                  75                  80
```

```
Glu Gly Leu Arg Asn Ala Leu Gln Gln Glu Asn His Ile Ile Asp Gly
                 85                  90                  95
Val Lys Val Gln Val His Thr Arg Arg Pro Lys Leu Pro Gln Thr Ser
            100                 105                 110
Asp Asp Glu Lys Lys Asp Phe
        115             119
```

<210> 1323
<211> 257
<212>Amino acid
<213> Homo sapiens

<400> 1323

```
Gly Ser Ser Asn Ile His Ser Ala Ser Thr His Gly Phe Cys His Trp
  1               5                  10                  15
Phe Ser Ser Pro Ser Thr Leu Lys Arg Gln Lys Gln Ala Ile Arg Phe
             20                  25                  30
Gln Lys Ile Arg Arg Gln Met Glu Ala Pro Gly Ala Pro Pro Arg Thr
         35                  40                  45
Leu Thr Trp Glu Ala Met Glu Gln Ile Arg Tyr Leu His Glu Glu Phe
     50                  55                  60
Pro Glu Ser Trp Ser Val Pro Arg Leu Ala Glu Gly Phe Asp Val Ser
 65                  70                  75                  80
Thr Asp Val Ile Arg Arg Val Leu Lys Ser Lys Phe Leu Pro Thr Leu
                 85                  90                  95
Glu Gln Lys Leu Lys Gln Asp Gln Lys Val Leu Lys Lys Ala Gly Leu
            100                 105                 110
Ala His Ser Leu Gln His Leu Arg Gly Ser Gly Asn Thr Ser Lys Leu
        115                 120                 125
Leu Pro Ala Gly His Ser Val Ser Gly Ser Leu Leu Met Pro Gly His
    130                 135                 140
Glu Ala Ser Ser Lys Asp Pro Asn His Ser Thr Ala Leu Lys Val Ile
145                 150                 155                 160
Glu Ser Asp Thr His Arg Thr Asn Thr Pro Arg Arg Arg Lys Gly Arg
                165                 170                 175
Asn Lys Glu Ile Gln Asp Leu Glu Glu Ser Phe Val Pro Val Ala Ala
            180                 185                 190
Pro Leu Gly His Pro Arg Glu Leu Gln Lys Tyr Ser Ser Asp Ser Glu
        195                 200                 205
Ser Pro Arg Gly Thr Gly Ser Gly Ala Leu Pro Ser Gly Gln Lys Leu
    210                 215                 220
Glu Glu Leu Lys Ala Glu Glu Pro Asp Asn Phe Ser Ser Lys Val Val
225                 230                 235                 240
Gln Arg Gly Arg Glu Phe Phe Asp Ser Asn Gly Asn Phe Leu Tyr Arg
                245                 250                 255
Ile
257
```

<210> 1324
<211> 273
<212>Amino acid
<213> Homo sapiens

<400> 1324

```
Glu Thr Arg Val Lys Thr Ser Leu Glu Leu Leu Arg Thr Gln Leu Glu
 1               5                  10                  15
Pro Thr Gly Thr Val Gly Asn Thr Ile Met Thr Ser Gln Pro Val Pro
            20                  25                  30
Asn Glu Thr Ile Ile Val Leu Pro Ser Asn Val Ile Asn Phe Ser Gln
        35                  40                  45
Ala Glu Lys Pro Glu Pro Thr Asn Gln Gly Gln Asp Ser Leu Lys Lys
    50                  55                  60
His Leu His Ala Glu Ile Lys Val Ile Gly Thr Ile Gln Ile Leu Cys
65                  70                  75                  80
Gly Met Met Val Leu Ser Leu Gly Ile Ile Leu Ala Ser Ala Ser Phe
                85                  90                  95
Ser Pro Asn Phe Thr Gln Val Thr Ser Thr Leu Leu Asn Ser Ala Tyr
            100                 105                 110
Pro Phe Ile Gly Pro Phe Phe Phe Ile Ile Ser Gly Ser Leu Ser Ile
        115                 120                 125
Ala Thr Glu Lys Arg Leu Thr Lys Leu Leu Val His Ser Ser Leu Val
    130                 135                 140
Gly Ser Ile Leu Ser Ala Leu Ser Ala Leu Val Gly Phe Ile Ile Leu
145                 150                 155                 160
Ser Val Lys Gln Ala Thr Leu Asn Pro Ala Ser Leu Gln Cys Glu Leu
                165                 170                 175
Asp Lys Asn Asn Ile Pro Thr Arg Ser Tyr Val Ser Tyr Phe Tyr His
            180                 185                 190
Asp Ser Leu Tyr Thr Thr Asp Cys Tyr Thr Ala Lys Ala Ser Leu Ala
        195                 200                 205
Gly Thr Leu Ser Leu Met Leu Ile Cys Thr Leu Leu Glu Phe Cys Leu
    210                 215                 220
Ala Val Leu Thr Ala Val Leu Arg Trp Lys Gln Ala Tyr Ser Asp Phe
225                 230                 235                 240
Pro Gly Ser Val Leu Phe Leu Pro His Ser Tyr Ile Gly Asn Ser Gly
                245                 250                 255
Met Ser Ser Lys Met Thr His Asp Cys Gly Tyr Glu Glu Leu Leu Thr
            260                 265                 270
Ser
273
```

<210> 1325
<211> 477
<212>Amino acid
<213> Homo sapiens

<400> 1325

```
Glu Met Val Gly Ala Met Trp Lys Val Ile Val Ser Leu Val Leu Leu
 1               5                  10                  15
Met Pro Gly Pro Cys Asp Gly Leu Phe Arg Ser Leu Tyr Arg Ser Val
            20                  25                  30
Ser Met Pro Pro Lys Gly Asp Ser Gly Gln Pro Leu Phe Leu Thr Pro
        35                  40                  45
Tyr Ile Glu Ala Gly Lys Ile Gln Lys Gly Arg Glu Leu Ser Leu Val
    50                  55                  60
Gly Pro Phe Pro Gly Leu Asn Met Lys Ser Tyr Ala Gly Phe Leu Thr
65                  70                  75                  80
Val Asn Lys Thr Tyr Asn Ser Asn Leu Phe Phe Trp Phe Phe Pro Ala
                85                  90                  95
Gln Ile Gln Pro Glu Asp Ala Pro Val Val Leu Trp Leu Gln Gly Gly
            100                 105                 110
Pro Gly Gly Ser Ser Met Phe Gly Leu Phe Val Glu His Gly Pro Tyr
        115                 120                 125
```

```
Val Val Thr Ser Asn Met Thr Leu Arg Asp Arg Asp Phe Pro Trp Thr
    130                 135                 140
Thr Thr Leu Ser Met Leu Tyr Ile Asp Asn Pro Val Gly Thr Gly Phe
145                 150                 155                 160
Ser Phe Thr Asp Asp Thr His Gly Tyr Ala Val Asn Glu Asp Asp Val
                165                 170                 175
Ala Arg Asp Leu Tyr Ser Ala Leu Ile Gln Phe Phe Gln Ile Phe Pro
            180                 185                 190
Glu Tyr Lys Asn Asn Asp Phe Tyr Val Thr Gly Glu Ser Tyr Ala Gly
        195                 200                 205
Lys Tyr Val Pro Ala Ile Ala His Leu Ile His Ser Leu Asn Pro Val
    210                 215                 220
Arg Glu Val Lys Ile Asn Leu Asn Gly Ile Ala Ile Gly Asp Gly Tyr
225                 230                 235                 240
Ser Asp Pro Glu Ser Ile Ile Gly Gly Tyr Ala Glu Phe Leu Tyr Gln
                245                 250                 255
Ile Gly Leu Leu Asp Glu Lys Gln Lys Lys Tyr Phe Gln Lys Gln Cys
            260                 265                 270
His Glu Cys Ile Glu His Ile Arg Lys Gln Asn Trp Phe Glu Ala Phe
        275                 280                 285
Glu Ile Leu Asp Lys Leu Leu Asp Gly Asp Leu Thr Ser Asp Pro Ser
    290                 295                 300
Tyr Phe Gln Asn Val Thr Gly Cys Ser Asn Tyr Tyr Asn Phe Leu Arg
305                 310                 315                 320
Cys Thr Glu Pro Glu Asp Gln Leu Tyr Tyr Val Lys Phe Leu Ser Leu
                325                 330                 335
Pro Glu Val Arg Gln Ala Ile His Val Gly Asn Gln Thr Phe Asn Asp
            340                 345                 350
Gly Thr Ile Val Glu Lys Tyr Leu Arg Glu Asp Thr Val Gln Ser Val
        355                 360                 365
Lys Pro Trp Leu Thr Glu Ile Met Asn Asn Tyr Lys Val Leu Ile Tyr
    370                 375                 380
Asn Gly Gln Leu Asp Ile Ile Val Ala Ala Ala Leu Thr Glu Arg Ser
385                 390                 395                 400
Leu Met Gly Met Asp Trp Lys Gly Ser Gln Glu Tyr Lys Lys Ala Glu
                405                 410                 415
Lys Lys Val Trp Lys Ile Phe Lys Ser Asp Ser Glu Val Ala Gly Tyr
            420                 425                 430
Ile Arg Gln Ala Gly Asp Phe His Gln Val Ile Ile Arg Gly Gly Gly
        435                 440                 445
His Ile Leu Pro Tyr Asp Gln Pro Leu Arg Ala Phe Asp Met Ile Asn
    450                 455                 460
Arg Phe Ile Tyr Gly Lys Gly Trp Asp Pro Tyr Val Gly
465                 470                 475     477
```

<210> 1326
<211> 160
<212>Amino acid
<213> Homo sapiens

<400> 1326

```
Arg Asp Glu Arg Ala Lys Val Pro Phe Arg Ser Thr Glu Gly Gly Arg
 1               5                  10                  15
Arg Arg Arg Arg Arg Met Glu Ala Val Val Phe Val Phe Ser Leu Leu
            20                  25                  30
Asp Cys Cys Ala Leu Ile Phe Leu Ser Val Tyr Phe Ile Ile Thr Leu
        35                  40                  45
Ser Asp Leu Glu Cys Asp Tyr Ile Asn Ala Arg Ser Cys Cys Ser Lys
    50                  55                  60
```

```
Leu Asn Lys Trp Val Ile Pro Glu Leu Ile Gly His Thr Ile Val Thr
 65                  70                  75                  80
Val Leu Leu Leu Met Ser Leu His Trp Phe Ile Phe Leu Leu Asn Leu
                85                  90                  95
Pro Val Ala Thr Trp Asn Ile Tyr Arg Tyr Ile Met Val Pro Ser Gly
            100                 105                 110
Asn Met Gly Val Phe Asp Pro Thr Glu Ile His Asn Arg Gly Gln Leu
        115                 120                 125
Lys Ser His Met Lys Glu Ala Met Ile Lys Leu Gly Phe His Leu Leu
    130                 135                 140
Cys Phe Phe Met Tyr Leu Tyr Ser Met Ile Leu Ala Leu Ile Asn Asp
145                 150                 155                 160
```

<210> 1327
<211> 131
<212>Amino acid
<213> Homo sapiens

<400> 1327

```
Gln Ser Pro Gly His Gly Ala Pro Cys Gln Leu Ser Ser Ser His Ser
  1               5                  10                  15
Arg Ser Asn Arg Leu Leu Ser Pro Met Ala Arg Ala Thr Leu Ser Ala
            20                  25                  30
Ala Pro Ser Asn Pro Arg Leu Leu Arg Val Ala Leu Leu Leu Leu Leu
        35                  40                  45
Leu Val Ala Ala Ser Arg Arg Ala Ala Gly Ala Pro Leu Ala Thr Glu
    50                  55                  60
Leu Arg Cys Gln Cys Leu Gln Thr Leu Gln Gly Ile His Leu Lys Asn
 65                  70                  75                  80
Ile Gln Ser Val Lys Val Lys Ser Pro Gly Pro His Cys Ala Gln Thr
                85                  90                  95
Glu Val Ile Ala Thr Leu Lys Asn Gly Gln Lys Ala Cys Leu Asn Pro
            100                 105                 110
Ala Ser Pro Met Val Lys Lys Ile Ile Glu Lys Met Leu Lys Asn Gly
        115                 120                 125
Lys Ser Asn
    130 131
```

<210> 1328
<211> 44
<212>Amino acid
<213> Homo sapiens

<400> 1328

```
His Pro Leu Ser Leu Val Phe Leu Ala Leu Asn Thr Gly Lys Glu Lys
  1               5                  10                  15
Ser His Pro Gly Gly Gly Gly Glu Arg Pro Gly Leu Ala Gly Gln Gly
            20                  25                  30
Glu Pro Asp His Pro Ala Gly Ala Arg Asp Gly Arg
        35                  40                  44
```

<210> 1329
<211> 525
<212>Amino acid
<213> Homo sapiens

<400> 1329

```
Cys Thr Pro Val Ala Arg Ser Met Ala Thr Thr Ala Thr Cys Thr Arg
 1               5                  10                  15
Phe Thr Asp Asp Tyr Gln Leu Phe Glu Glu Leu Gly Lys Gly Ala Phe
            20                  25                  30
Ser Val Val Arg Arg Cys Val Lys Lys Thr Ser Thr Gln Glu Tyr Ala
        35                  40                  45
Ala Lys Ile Ile Asn Thr Lys Lys Leu Ser Ala Arg Asp His Gln Lys
    50                  55                  60
Leu Glu Arg Glu Ala Arg Ile Cys Arg Leu Leu Lys His Pro Asn Ile
65                  70                  75                  80
Val Arg Leu His Asp Ser Ile Ser Glu Glu Gly Phe His Tyr Leu Val
                85                  90                  95
Phe Asp Leu Val Thr Gly Gly Glu Leu Phe Glu Asp Ile Val Ala Arg
            100                 105                 110
Glu Tyr Tyr Ser Glu Ala Asp Ala Ser His Cys Ile His Gln Ile Leu
        115                 120                 125
Glu Ser Val Asn His Ile His Gln His Asp Ile Val His Arg Asp Leu
    130                 135                 140
Lys Pro Glu Asn Leu Leu Leu Ala Ser Lys Cys Lys Gly Ala Ala Val
145                 150                 155                 160
Lys Leu Ala Asp Phe Gly Leu Ala Ile Glu Val Gln Gly Glu Gln Gln
                165                 170                 175
Ala Trp Phe Gly Phe Ala Gly Thr Pro Gly Tyr Leu Ser Pro Glu Val
            180                 185                 190
Leu Arg Lys Asp Pro Tyr Gly Lys Pro Val Asp Ile Trp Ala Cys Gly
        195                 200                 205
Val Ile Leu Tyr Ile Leu Leu Val Gly Tyr Pro Pro Phe Trp Asp Glu
    210                 215                 220
Asp Gln His Lys Leu Tyr Gln Gln Ile Lys Ala Gly Ala Tyr Asp Phe
225                 230                 235                 240
Pro Ser Pro Glu Trp Asp Thr Val Thr Pro Glu Ala Lys Asn Leu Ile
                245                 250                 255
Asn Gln Met Leu Thr Ile Asn Pro Ala Lys Arg Ile Thr Ala Asp Gln
            260                 265                 270
Ala Leu Lys His Pro Trp Val Cys Gln Arg Ser Thr Val Ala Ser Met
        275                 280                 285
Met His Arg Gln Glu Thr Val Glu Cys Leu Arg Lys Phe Asn Ala Arg
    290                 295                 300
Arg Lys Leu Lys Gly Ala Ile Leu Thr Thr Met Leu Val Ser Arg Asn
305                 310                 315                 320
Phe Ser Ala Ala Lys Ser Leu Leu Asn Lys Lys Ser Asp Gly Gly Val
                325                 330                 335
Lys Pro Gln Ser Asn Asn Lys Asn Ser Leu Val Ser Pro Ala Gln Glu
            340                 345                 350
Pro Ala Pro Leu Gln Thr Ala Met Glu Pro Gln Thr Thr Val Val His
        355                 360                 365
Asn Ala Thr Asp Gly Ile Lys Gly Ser Thr Glu Ser Cys Asn Thr Thr
    370                 375                 380
Thr Glu Asp Glu Asp Leu Lys Val Arg Lys Gln Glu Ile Ile Lys Ile
385                 390                 395                 400
Thr Glu Gln Leu Ile Glu Ala Ile Asn Asn Gly Asp Phe Glu Ala Tyr
                405                 410                 415
Thr Lys Ile Cys Asp Pro Gly Leu Thr Ser Phe Glu Pro Glu Ala Leu
            420                 425                 430
```

```
Gly Asn Leu Val Glu Gly Met Asp Phe His Lys Phe Tyr Phe Glu Asn
        435                 440                 445
Leu Leu Ser Lys Asn Ser Lys Pro Ile His Thr Thr Ile Leu Asn Pro
    450                 455                 460
His Val His Val Ile Gly Glu Asp Ala Ala Cys Ile Ala Tyr Ile Arg
465                 470                 475                 480
Leu Thr Gln Tyr Ile Asp Gly Gln Gly Arg Pro Arg Thr Ser Gln Ser
                485                 490                 495
Glu Glu Thr Arg Val Trp His Arg Arg Asp Gly Lys Trp Leu Asn Val
            500                 505                 510
His Tyr His Cys Ser Gly Ala Pro Ala Ala Pro Leu Gln
        515                 520                 525
```

<210> 1330
<211> 205
<212>Amino acid
<213> Homo sapiens

<400> 1330

```
Asn Arg Arg Thr Val Lys Met Leu Leu Glu Leu Ser Glu Glu His Lys
  1               5                  10                  15
Glu His Leu Ala Phe Leu Pro Gln Val Asp Ser Ala Val Val Ala Glu
            20                  25                  30
Phe Gly Arg Ile Ala Val Glu Phe Leu Arg Arg Gly Ala Asn Pro Lys
        35                  40                  45
Ile Tyr Glu Gly Ala Ala Arg Lys Leu Asn Val Ser Ser Asp Thr Val
    50                  55                  60
Gln His Gly Val Glu Gly Leu Thr Tyr Leu Leu Thr Glu Ser Ser Lys
65                  70                  75                  80
Leu Met Ile Ser Glu Leu Asp Phe Gln Asp Ser Val Phe Val Leu Gly
                85                  90                  95
Phe Ser Glu Glu Leu Asn Lys Leu Leu Leu Gln Leu Tyr Leu Asp Asn
            100                 105                 110
Arg Lys Glu Ile Arg Thr Ile Leu Ser Glu Leu Ala Pro Ser Leu Pro
        115                 120                 125
Ser Tyr His Asn Leu Glu Trp Arg Leu Asp Val Gln Leu Ala Ser Arg
    130                 135                 140
Ser Leu Arg Gln Gln Ile Lys Pro Ala Val Thr Ile Lys Leu His Leu
145                 150                 155                 160
Asn Gln Asn Gly Asp His Asn Thr Lys Val Leu Gln Thr Asp Pro Ala
                165                 170                 175
Thr Leu Leu His Leu Val Gln Gln Leu Glu Gln Ala Leu Glu Glu Met
            180                 185                 190
Lys Thr Asn His Cys Arg Arg Val Val Arg Asn Ile Lys
        195                 200                 205
```

<210> 1331
<211> 78
<212>Amino acid
<213> Homo sapiens

<400> 1331

```
Gly Thr Ser Ile Tyr Leu Ala His Arg Val Ala Arg Ala Trp Glu Leu
  1               5                  10                  15
```

```
Ala Gln Phe Ile His His Thr Ser Lys Lys Ala Asp Val Val Leu Ala
             20                  25                  30
Cys Gly Asp Ser Ile Val His Pro Glu Asp Leu Ile Cys Cys Pro Leu
         35                  40                  45
Thr Gly Arg Ser Cys Leu Cys Asp Val His Leu Leu Ser Ser Leu Leu
     50                  55                  60
Ala Arg Leu Gly Arg Gly Tyr Ala Val Ser Leu Thr Asn Leu
 65                  70                  75          78
```

<210> 1332
<211> 274
<212>Amino acid
<213> Homo sapiens

<400> 1332

```
Arg Gly Cys Gly Ser Cys Gly Tyr Lys Pro Ser Ala Gly Pro Ala Trp
  1               5                  10                  15
Arg Pro Arg Pro Pro Pro Ala Val Ser Pro Leu Arg His Pro Glu Pro
             20                  25                  30
Ala Lys Val Leu Ser Phe Ser Ser Cys Pro Leu Pro Ala Leu Gly Arg
         35                  40                  45
Thr Gly Pro Ser Arg Ala Ala Arg Ala Gln Ser Leu Thr Met Ala Ser
     50                  55                  60
Leu Phe Lys Lys Lys Thr Val Asp Asp Val Ile Lys Glu Gln Asn Arg
 65                  70                  75                  80
Glu Leu Arg Gly Thr Gln Arg Ala Ile Ile Arg Asp Arg Ala Ala Leu
                 85                  90                  95
Glu Lys Gln Glu Lys Gln Leu Glu Leu Glu Ile Lys Lys Met Ala Lys
            100                 105                 110
Ile Gly Asn Lys Glu Ala Cys Lys Val Leu Ala Lys Gln Leu Val His
        115                 120                 125
Leu Arg Lys Gln Lys Thr Arg Thr Phe Ala Val Ser Ser Lys Val Thr
    130                 135                 140
Ser Met Ser Thr Gln Thr Lys Val Met Asn Ser Gln Met Lys Met Ala
145                 150                 155                 160
Gly Ala Met Ser Thr Thr Ala Lys Thr Met Gln Ala Val Asn Lys Lys
                165                 170                 175
Met Asp Pro Gln Lys Thr Leu Gln Thr Met Gln Asn Phe Gln Lys Glu
            180                 185                 190
Asn Met Lys Met Glu Met Thr Glu Glu Met Ile Asn Asp Thr Leu Asp
        195                 200                 205
Asp Ile Phe Asp Gly Ser Asp Asp Glu Glu Glu Ser Gln Asp Ile Val
    210                 215                 220
Asn Gln Val Leu Asp Glu Ile Gly Ile Glu Ile Ser Gly Lys Met Ala
225                 230                 235                 240
Lys Ala Pro Ser Ala Ala Arg Ser Leu Pro Ser Ala Ser Thr Ser Lys
                245                 250                 255
Ala Thr Ile Ser Asp Glu Glu Ile Glu Arg Gln Leu Lys Ala Leu Gly
            260                 265                 270
Val Asp
    274
```

<210> 1333
<211> 157
<212>Amino acid
<213> Homo sapiens

<400> 1333

```
Ser Thr Asp Gly Asn Gly Ala Glu Arg Leu Phe Ala Glu Leu Arg Lys
 1               5                  10                  15
Met Asn Ala Arg Gly Leu Gly Ser Glu Leu Lys Asp Ser Ile Pro Val
            20                  25                  30
Thr Glu Leu Ser Ala Ser Gly Pro Phe Glu Ser His Asp Leu Leu Arg
        35                  40                  45
Lys Gly Phe Ser Cys Val Lys Asn Glu Leu Leu Pro Ser His Pro Leu
    50                  55                  60
Glu Leu Ser Glu Lys Asn Phe Gln Leu Asn Gln Asp Lys Met Asn Phe
65                  70                  75                  80
Ser Thr Leu Arg Asn Ile Gln Gly Leu Phe Ala Pro Leu Lys Leu Gln
                85                  90                  95
Met Glu Phe Lys Ala Val Gln Gln Val Gln Arg Leu Pro Phe Leu Ser
            100                 105                 110
Ser Ser Asn Leu Ser Leu Asp Val Leu Arg Gly Asn Asp Glu Thr Ile
        115                 120                 125
Gly Phe Glu Asp Ile Leu Asn Asp Pro Ser Gln Ser Glu Val Met Gly
    130                 135                 140
Glu Pro His Leu Met Val Glu Tyr Lys Leu Gly Leu Leu
145                 150                 155     157
```

<210> 1334
<211> 193
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(193)
<223> X = any amino acid or stop code

<400> 1334

```
Arg Asn Met Lys Leu His Tyr Val Ala Val Leu Thr Leu Ala Ile Leu
 1               5                  10                  15
Met Phe Leu Thr Trp Leu Pro Glu Ser Leu Ser Cys Asn Lys Ala Leu
            20                  25                  30
Cys Ala Ser Asp Val Ser Lys Cys Leu Ile Gln Glu Leu Cys Gln Cys
        35                  40                  45
Arg Pro Gly Glu Gly Asn Cys Ser Cys Cys Lys Glu Cys Met Leu Cys
    50                  55                  60
Leu Gly Ala Leu Trp Asp Glu Cys Cys Asp Cys Val Gly Met Cys Asn
65                  70                  75                  80
Pro Arg Asn Tyr Ser Asp Thr Pro Pro Thr Ser Lys Ser Thr Val Glu
                85                  90                  95
Glu Leu His Glu Pro Ile Pro Ser Leu Phe Arg Ala Leu Thr Glu Gly
            100                 105                 110
Asp Thr Gln Leu Asn Trp Asn Ile Val Ser Phe Pro Val Ala Glu Glu
        115                 120                 125
Leu Ser His His Glu Asn Leu Val Ser Phe Leu Glu Thr Val Asn Gln
    130                 135                 140
Pro His His Gln Asn Val Ser Val Pro Ser Asn Asn Val His Ala Pro
145                 150                 155                 160
Tyr Ser Ser Asp Lys Glu Xaa Leu Pro Thr Val Asp Phe Phe His Ser
                165                 170                 175
Ala Pro Ser Cys Gly Leu Ser Met Xaa Ser Ile Ile Phe Phe Glu Glu
```

180 185 190
Thr
193

<210> 1335
<211> 179
<212>Amino acid
<213> Homo sapiens

<400> 1335
Val Gly Gly Val Pro Thr Trp Leu Glu Gly Cys Gly Ser Gly Asn Pro
1 5 10 15
Ser Pro Arg Ser Gly Gly Gly Pro Gly Ala Arg Leu Thr Leu Pro Ala
20 25 30
Leu Gln Met Thr Val His Asn Leu Tyr Leu Phe Asp Arg Asn Gly Val
35 40 45
Cys Leu His Tyr Ser Glu Trp His Arg Lys Lys Gln Ala Gly Ile Pro
50 55 60
Lys Glu Glu Glu Tyr Lys Leu Met Tyr Gly Met Leu Phe Ser Ile Arg
65 70 75 80
Ser Phe Val Ser Lys Met Ser Pro Leu Asp Met Lys Asp Gly Phe Leu
85 90 95
Ala Phe Gln Thr Ser Arg Tyr Lys Leu His Tyr Tyr Glu Thr Pro Thr
100 105 110
Gly Ile Lys Val Val Met Asn Thr Asp Leu Gly Val Gly Pro Ile Arg
115 120 125
Asp Val Leu His His Ile Tyr Ser Ala Leu Tyr Val Glu Leu Val Val
130 135 140
Lys Asn Pro Leu Cys Pro Leu Gly Gln Thr Val Gln Ser Glu Leu Phe
145 150 155 160
Arg Ser Arg Leu Asp Ser Tyr Val Arg Ser Leu Pro Phe Phe Ser Ala
165 170 175
Arg Ala Gly
179

<210> 1336
<211> 236
<212>Amino acid
<213> Homo sapiens

<400> 1336
Pro Gly Leu Ser Gln Glu Pro Ser Gly Ser Met Glu Thr Val Val Ile
1 5 10 15
Val Ala Ile Gly Val Leu Ala Thr Ile Phe Leu Ala Ser Phe Ala Ala
20 25 30
Leu Val Leu Val Cys Arg Gln Arg Tyr Cys Arg Pro Arg Asp Leu Leu
35 40 45
Gln Arg Tyr Asp Ser Lys Pro Ile Val Asp Leu Ile Gly Ala Met Glu
50 55 60
Thr Gln Ser Glu Pro Ser Glu Leu Glu Leu Asp Asp Val Val Ile Thr
65 70 75 80
Asn Pro His Ile Glu Ala Ile Leu Glu Asn Glu Asp Trp Ile Glu Asp
85 90 95
Ala Ser Gly Leu Met Ser His Cys Ile Ala Ile Leu Lys Ile Cys His

```
            100                 105                 110
Thr Leu Thr Glu Lys Leu Val Ala Met Thr Met Gly Ser Gly Ala Lys
        115                 120                 125
Met Lys Thr Ser Ala Ser Val Ser Asp Ile Ile Val Val Ala Lys Arg
    130                 135                 140
Ile Ser Pro Arg Val Asp Asp Val Val Lys Ser Met Tyr Pro Pro Leu
145                 150                 155                 160
Asp Pro Lys Leu Leu Asp Ala Arg Thr Thr Ala Leu Leu Leu Ser Val
                165                 170                 175
Ser His Leu Val Leu Val Thr Arg Asn Ala Cys His Leu Thr Gly Gly
            180                 185                 190
Leu Asp Trp Ile Asp Gln Ser Leu Ser Ala Ala Glu Glu His Leu Glu
        195                 200                 205
Val Leu Arg Glu Ala Ala Leu Ala Ser Glu Pro Asp Lys Gly Leu Pro
    210                 215                 220
Gly Pro Glu Gly Phe Leu Gln Glu Gln Ser Ala Ile
225                 230                 235 236
```

<210> 1337
<211> 161
<212>Amino acid
<213> Homo sapiens

<400> 1337

```
Val Gly Met Glu Leu Pro Ala Val Asn Leu Lys Val Ile Leu Leu Gly
  1               5                  10                  15
His Trp Leu Leu Thr Thr Trp Gly Cys Ile Val Phe Ser Gly Ser Tyr
            20                  25                  30
Ala Trp Ala Asn Phe Thr Ile Leu Ala Leu Gly Val Trp Ala Val Ala
        35                  40                  45
Gln Arg Asp Ser Ile Asp Ala Ile Ser Met Phe Leu Gly Gly Leu Leu
    50                  55                  60
Ala Thr Ile Phe Leu Asp Ile Val His Ile Ser Ile Phe Tyr Pro Arg
65                  70                  75                  80
Val Ser Leu Thr Asp Thr Gly Arg Phe Gly Val Gly Met Ala Ile Leu
                85                  90                  95
Ser Leu Leu Leu Lys Pro Leu Ser Cys Cys Phe Val Tyr His Met Tyr
            100                 105                 110
Arg Glu Arg Gly Gly Glu Leu Leu Val His Thr Gly Phe Leu Gly Ser
        115                 120                 125
Ser Gln Asp Arg Ser Ala Tyr Gln Thr Ile Asp Ser Ala Glu Ala Pro
    130                 135                 140
Ala Asp Pro Phe Ala Val Pro Glu Gly Arg Ser Gln Asp Ala Arg Gly
145                 150                 155                 160
Tyr
161
```

<210> 1338
<211> 200
<212>Amino acid
<213> Homo sapiens

<400> 1338

```
Pro Ala Ser Arg Pro Leu Leu Gly Pro Asp Thr Gly Ser Val Ala Asn
```

```
  1               5                  10                  15
Ile Phe Lys Gly Leu Val Ile Leu Pro Glu Met Ser Leu Val Ile Arg
             20                  25                  30
Asn Leu Gln Arg Val Ile Pro Ile Arg Arg Ala Pro Leu Arg Ser Lys
         35                  40                  45
Ile Glu Ile Val Arg Arg Ile Leu Gly Val Gln Lys Phe Asp Leu Gly
     50                  55                  60
Ile Ile Cys Val Asp Asn Lys Asn Ile Gln His Ile Asn Arg Ile Tyr
 65                  70                  75                  80
Arg Asp Arg Asn Val Pro Thr Asp Val Leu Ser Phe Pro Phe His Glu
                 85                  90                  95
His Leu Lys Ala Gly Glu Phe Pro Gln Pro Asp Phe Pro Asp Asp Tyr
            100                 105                 110
Asn Leu Gly Asp Ile Phe Leu Gly Val Glu Tyr Ile Phe His Gln Cys
        115                 120                 125
Lys Glu Asn Glu Asp Tyr Asn Asp Val Leu Thr Val Thr Ala Thr His
    130                 135                 140
Gly Leu Cys His Leu Leu Gly Phe Thr His Gly Thr Glu Ala Glu Trp
145                 150                 155                 160
Gln Gln Met Phe Gln Lys Glu Lys Ala Val Leu Asp Glu Leu Gly Arg
                165                 170                 175
Arg Thr Gly Thr Arg Leu Gln Pro Leu Thr Pro Gly Pro Leu Pro Glu
            180                 185                 190
Gly Ala Glu Gly Arg Val Pro Phe
        195                 200
```

<210> 1339
<211> 267
<212>Amino acid
<213> Homo sapiens

<400> 1339

```
Leu Arg Asn Ala Leu Asp Val Leu His Arg Glu Val Pro Arg Val Leu
  1               5                  10                  15
Val Asn Leu Val Asp Phe Leu Asn Pro Thr Ile Met Arg Gln Val Phe
             20                  25                  30
Leu Gly Asn Pro Asp Lys Cys Pro Val Gln Gln Ala Met Leu Glu Pro
         35                  40                  45
Leu Gly Ser Lys Thr Glu Thr Leu Asp Leu Arg Ala Glu Met Pro Ile
     50                  55                  60
Thr Cys Pro Thr Gln Asn Glu Pro Phe Leu Arg Thr Pro Arg Asn Ser
 65                  70                  75                  80
Asn Tyr Thr Tyr Pro Ile Lys Pro Ala Ile Glu Asn Trp Gly Ser Asp
                 85                  90                  95
Phe Leu Cys Thr Glu Trp Lys Ala Ser Asn Ser Val Pro Thr Ser Val
            100                 105                 110
His Gln Leu Arg Pro Ala Asp Ile Lys Val Val Ala Ala Leu Gly Asp
        115                 120                 125
Ser Leu Thr Thr Ala Val Gly Ala Arg Pro Asn Asn Ser Ser Asp Leu
    130                 135                 140
Pro Thr Ser Trp Arg Gly Leu Ser Trp Ser Ile Gly Gly Asp Gly Asn
145                 150                 155                 160
Leu Glu Thr His Thr Thr Leu Pro Asn Ile Leu Lys Lys Phe Asn Pro
                165                 170                 175
Tyr Leu Leu Gly Phe Ser Thr Ser Thr Trp Glu Gly Thr Ala Gly Leu
            180                 185                 190
Asn Val Ala Ala Glu Gly Ala Arg Ala Arg Asp Met Pro Ala Gln Ala
        195                 200                 205
Trp Asp Leu Val Glu Arg Met Lys Asn Ser Pro Asp Ile Asn Leu Glu
```

```
    210                 215                 220
Lys Asp Trp Lys Leu Val Thr Leu Phe Ile Gly Gly Asn Asp Leu Cys
225                 230                 235                 240
His Tyr Cys Glu Asn Pro Glu Ala His Leu Ala Thr Glu Tyr Val Gln
                245                 250                 255
His Ile Gln Gln Ala Leu Asp Ile Leu Ser Glu
            260                 265     267
```

<210> 1340
<211> 286
<212>Amino acid
<213> Homo sapiens

<400> 1340

```
Val Val Glu Phe Leu Trp Ser Arg Arg Pro Ser Gly Ser Ser Asp Pro
  1               5                  10                  15
Arg Pro Arg Arg Pro Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala
            20                  25                  30
Asn Leu Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser
        35                  40                  45
Ala Leu Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln
    50                  55                  60
Gln Phe Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val
65                  70                  75                  80
Lys Lys Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu
                85                  90                  95
Leu Val Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val
            100                 105                 110
Arg Asn Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp
        115                 120                 125
Leu Tyr Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val
    130                 135                 140
Leu Ile Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala
145                 150                 155                 160
Leu Met Met Glu Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly
                165                 170                 175
Leu Asn Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp
            180                 185                 190
Ser Gln Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln
        195                 200                 205
Asp Leu Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp
    210                 215                 220
Gln Lys Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val
225                 230                 235                 240
Gly Asp Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys
                245                 250                 255
Leu Gln Glu Arg Val Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln
            260                 265                 270
Glu Glu Gln Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg
        275                 280                 285 286
```

<210> 1341
<211> 233
<212>Amino acid
<213> Homo sapiens

<400> 1341

```
Lys Pro Glu Gly Ala Arg Arg Val Gln Phe Val Met Gly Leu Phe Gly
 1               5                  10                  15
Lys Thr Gln Glu Lys Pro Pro Lys Glu Leu Val Asn Glu Trp Ser Leu
            20                  25                  30
Lys Ile Arg Lys Glu Met Arg Val Val Asp Arg Gln Ile Arg Asp Ile
        35                  40                  45
Gln Arg Glu Glu Glu Lys Val Lys Arg Ser Val Lys Asp Ala Ala Lys
    50                  55                  60
Lys Gly Gln Lys Asp Val Cys Ile Val Leu Ala Lys Glu Met Ile Arg
65                  70                  75                  80
Ser Arg Lys Ala Val Ser Lys Leu Tyr Ala Ser Lys Ala His Met Asn
                85                  90                  95
Ser Val Leu Met Gly Met Lys Asn Gln Leu Ala Val Leu Arg Val Ala
            100                 105                 110
Gly Ser Leu Gln Lys Ser Thr Glu Val Met Lys Ala Met Gln Ser Leu
        115                 120                 125
Val Lys Ile Pro Glu Ile Gln Ala Thr Met Arg Glu Leu Ser Lys Glu
    130                 135                 140
Met Met Lys Ala Gly Ile Ile Glu Glu Met Leu Glu Asp Thr Phe Glu
145                 150                 155                 160
Ser Met Asp Asp Gln Glu Glu Met Glu Glu Glu Ala Glu Met Glu Ile
                165                 170                 175
Asp Arg Ile Leu Phe Glu Ile Thr Ala Gly Ala Leu Gly Lys Ala Pro
            180                 185                 190
Ser Lys Val Thr Asp Ala Leu Pro Glu Pro Glu Pro Pro Gly Ala Met
        195                 200                 205
Ala Ala Ser Glu Asp Glu Glu Glu Glu Glu Glu Ala Leu Glu Ala Met
    210                 215                 220
Gln Ser Arg Leu Ala Thr Leu Arg Ser
225                 230         233
```

<210> 1342
<211> 150
<212>Amino acid
<213> Homo sapiens

<400> 1342

```
Arg Trp Asn Ser Ile Met Glu Leu Ala Leu Leu Cys Gly Leu Val Val
 1               5                  10                  15
Met Ala Gly Val Ile Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys
            20                  25                  30
Met Val Lys Gln Val Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro
        35                  40                  45
Tyr Gly Cys His Cys Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala
    50                  55                  60
Thr Asp Trp Cys Cys Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys
65                  70                  75                  80
Thr Gln Gly Cys Gly Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe Ser
                85                  90                  95
Gln Gly Asn Ile His Cys Ser Asp Lys Gly Ser Trp Cys Glu Gln Gln
            100                 105                 110
Leu Cys Ala Cys Asp Lys Glu Val Ala Phe Cys Leu Lys Arg Asn Leu
        115                 120                 125
Asp Thr Tyr Gln Lys Arg Leu Arg Phe Tyr Trp Arg Pro His Cys Arg
    130                 135                 140
Gly Gln Thr Pro Gly Cys
```

145 150

<210> 1343
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1343
Lys Thr Val Ala Glu Glu Ala Ser Val Gly Asn Pro Glu Gly Ala Phe
1 5 10 15
Met Lys Met Leu Gln Ala Arg Lys Gln His Met Ser Thr Glu Leu Thr
20 25 30
Ile Glu Ser Glu Ala Pro Ser Asp Ser Ser Gly Ile Asn Leu Ser Gly
35 40 45
Phe Gly Ser Glu Gln Leu Asp Thr Asn Asp Glu Ser Asp Val Ser Ser
50 55 60
Ala Leu Ser Tyr Ile Leu Pro Tyr Leu Ser Leu Arg Asn Leu Gly Ala
65 70 75 80
Glu Ser Ile Leu Leu Pro Phe Thr Glu Gln Leu Phe Ser Asn Val Gln
85 90 95
Asp Gly Asp Arg Leu Leu Ser Ile Leu Lys Asn Asn Arg Lys Ser Pro
100 105 110
Ser Gln Ser Ser Leu Leu Gly Asn Lys Phe Lys Asn Lys Ile Phe
115 120 125 127

<210> 1344
<211> 126
<212>Amino acid
<213> Homo sapiens

<400> 1344
Leu Pro Leu Thr Leu Leu Leu Ala Ala Pro Phe Ala His Leu Leu Leu
1 5 10 15
Pro Pro Gly His Asp Gln Ser Pro Cys Trp His Pro Gly Pro Ala Leu
20 25 30
Ser Pro Gly Thr Leu Gly Pro Leu Ser Trp Ala Met Ala Asn Ser Gly
35 40 45
Leu Gln Leu Leu Gly Tyr Phe Leu Ala Leu Gly Gly Trp Val Gly Ile
50 55 60
Ile Ala Ser Thr Ala Leu Pro Gln Trp Lys Gln Ser Ser Tyr Ala Gly
65 70 75 80
Asp Ala Ser Ile Gln Leu Arg Ser Lys Val Phe Val Leu Glu Ser Glu
85 90 95
Trp Gly Gly Asp Ser Leu Gly Leu Pro Arg Asp Cys Gly Trp Ser Cys
100 105 110
Leu Leu His Ser Ala Val Arg Ser Glu Lys Gly Phe Trp Ser
115 120 125 126

<210> 1345
<211> 328
<212>Amino acid
<213> Homo sapiens

<400> 1345

```
Asp Pro Arg Val Arg Pro Pro Leu Leu Gln Pro Pro Pro Pro Leu Leu
 1               5                  10                  15
Pro Arg Leu Val Ile Leu Lys Met Ala Pro Leu Asp Leu Asp Lys Tyr
            20                  25                  30
Val Glu Ile Ala Arg Leu Cys Lys Tyr Leu Pro Glu Asn Asp Leu Lys
        35                  40                  45
Arg Leu Cys Asp Tyr Val Cys Asp Leu Leu Leu Glu Glu Ser Asn Val
    50                  55                  60
Gln Pro Val Ser Thr Pro Val Thr Val Cys Gly Asp Ile His Gly Gln
65                  70                  75                  80
Phe Tyr Asp Leu Cys Glu Leu Phe Arg Thr Gly Gly Gln Val Pro Asp
                85                  90                  95
Thr Asn Tyr Ile Phe Met Gly Asp Phe Val Asp Arg Gly Tyr Tyr Ser
            100                 105                 110
Leu Glu Thr Phe Thr Tyr Leu Leu Ala Leu Lys Ala Lys Trp Pro Asp
        115                 120                 125
Arg Ile Thr Leu Leu Arg Gly Asn His Glu Ser Arg Gln Ile Thr Gln
    130                 135                 140
Val Tyr Gly Phe Tyr Asp Glu Cys Gln Thr Lys Tyr Gly Asn Ala Asn
145                 150                 155                 160
Ala Trp Arg Tyr Cys Thr Lys Val Phe Asp Met Leu Thr Val Ala Ala
                165                 170                 175
Leu Ile Asp Glu Gln Ile Leu Cys Val His Gly Gly Leu Ser Pro Asp
            180                 185                 190
Ile Lys Thr Leu Asp Gln Ile Arg Thr Ile Glu Arg Asn Gln Glu Ile
        195                 200                 205
Pro His Lys Gly Ala Phe Cys Asp Leu Val Trp Ser Asp Pro Glu Asp
    210                 215                 220
Val Asp Thr Trp Ala Ile Ser Pro Arg Gly Ala Gly Trp Leu Phe Gly
225                 230                 235                 240
Ala Lys Val Thr Asn Glu Phe Val His Ile Asn Asn Leu Lys Leu Ile
                245                 250                 255
Cys Arg Ala His Gln Leu Val His Glu Gly Tyr Lys Phe Met Phe Asp
            260                 265                 270
Glu Lys Leu Val Thr Val Trp Ser Ala Pro Asn Tyr Cys Tyr Arg Cys
        275                 280                 285
Gly Asn Ile Ala Ser Ile Met Val Phe Lys Asp Val Asn Thr Arg Glu
    290                 295                 300
Pro Lys Leu Phe Arg Ala Val Pro Asp Ser Glu Arg Val Ile Pro Pro
305                 310                 315                 320
Arg Thr Thr Thr Pro Tyr Phe Leu
                325         328
```

<210> 1346
<211> 253
<212>Amino acid
<213> Homo sapiens

<400> 1346

```
Ser Phe Ala Gly Ala Ala Ala Arg Pro Ser Thr Pro Pro Ala Ser Gly
 1               5                  10                  15
Arg Gly Ala Ala Pro Gly Arg Pro Gly Pro Ser Pro Met Asp Leu Arg
            20                  25                  30
Ala Gly Asp Ser Trp Gly Met Leu Ala Cys Leu Cys Thr Val Leu Trp
```

```
         35                  40                  45
His Leu Pro Ala Val Pro Ala Leu Asn Arg Thr Gly Asp Pro Gly Pro
     50                  55                  60
Gly Pro Ser Ile Gln Lys Thr Tyr Asp Leu Thr Arg Tyr Leu Glu His
 65                  70                  75                  80
Gln Leu Arg Ser Leu Ala Gly Thr Tyr Leu Asn Tyr Leu Gly Pro Pro
                 85                  90                  95
Phe Asn Glu Pro Asp Phe Asn Pro Pro Arg Leu Gly Ala Glu Thr Leu
            100                 105                 110
Pro Arg Ala Thr Val Asp Leu Glu Val Trp Arg Ser Leu Asn Asp Lys
        115                 120                 125
Leu Arg Leu Thr Gln Asn Tyr Glu Ala Tyr Ser His Leu Leu Cys Tyr
    130                 135                 140
Leu Arg Gly Leu Asn Arg Gln Ala Ala Thr Ala Glu Leu Arg Arg Ser
145                 150                 155                 160
Leu Ala His Phe Cys Thr Ser Leu Gln Gly Leu Leu Gly Ser Ile Ala
                165                 170                 175
Gly Val Met Ala Ala Leu Gly Tyr Pro Leu Pro Gln Pro Leu Pro Gly
            180                 185                 190
Thr Glu Pro Thr Trp Thr Pro Gly Pro Ala His Ser Asp Phe Leu Gln
        195                 200                 205
Lys Met Asp Asp Phe Trp Leu Leu Lys Glu Leu Gln Thr Trp Leu Trp
    210                 215                 220
Arg Ser Ala Lys Asp Phe Asn Arg Leu Lys Lys Lys Met Gln Pro Pro
225                 230                 235                 240
Ala Ala Ala Val Thr Leu His Leu Gly Ala His Gly Phe
                245                 250         253
```

<210> 1347
<211> 195
<212>Amino acid
<213> Homo sapiens

<400> 1347

```
Ile Lys Ile Ser Leu Lys Lys Arg Ser Met Ser Gly Ile Ser Gly Cys
 1               5                  10                  15
Pro Phe Phe Leu Trp Gly Leu Leu Ala Leu Leu Gly Leu Ala Leu Val
            20                  25                  30
Ile Ser Leu Ile Phe Asn Ile Ser His Tyr Val Glu Lys Gln Arg Gln
        35                  40                  45
Asp Lys Met Tyr Ser Tyr Ser Ser Asp His Thr Arg Val Asp Glu Tyr
    50                  55                  60
Tyr Ile Glu Asp Thr Pro Ile Tyr Gly Asn Leu Asp Asp Met Ile Ser
65                  70                  75                  80
Glu Pro Met Asp Glu Asn Cys Tyr Glu Gln Met Lys Ala Arg Pro Glu
                85                  90                  95
Lys Ser Val Asn Lys Met Gln Glu Ala Thr Pro Ser Ala Gln Ala Thr
            100                 105                 110
Asn Glu Thr Gln Met Cys Tyr Ala Ser Leu Asp His Ser Val Lys Gly
        115                 120                 125
Lys Arg Arg Lys Pro Arg Lys Gln Asn Thr His Phe Ser Asp Lys Asp
    130                 135                 140
Gly Asp Glu Gln Leu His Ala Ile Asp Ala Ser Val Ser Lys Thr Thr
145                 150                 155                 160
Leu Val Asp Ser Phe Ser Pro Glu Ser Gln Ala Val Glu Glu Asn Ile
                165                 170                 175
His Asp Asp Pro Ile Arg Leu Phe Gly Leu Ile Arg Ala Lys Arg Glu
            180                 185                 190
Pro Ile Asn
```

195

<210> 1348
<211> 268
<212>Amino acid
<213> Homo sapiens

<400> 1348

```
Val Glu Phe His Pro Gln Arg Ala Arg Ala Gly Ala Arg Ala Pro Ser
  1               5                  10                  15
Met Gly Val Leu Leu Thr Gln Arg Thr Leu Leu Ser Leu Val Leu Ala
             20                  25                  30
Leu Leu Phe Pro Ser Met Ala Ser Met Ala Ala Ile Gly Ser Cys Ser
         35                  40                  45
Lys Glu Tyr Arg Val Leu Leu Gly Gln Leu Gln Lys Gln Thr Asp Leu
     50                  55                  60
Met Gln Asp Thr Ser Arg Leu Leu Asp Pro Tyr Ile Arg Ile Gln Gly
 65                  70                  75                  80
Leu Asp Val Pro Lys Leu Arg Glu His Cys Arg Glu Arg Pro Gly Ala
                 85                  90                  95
Phe Pro Ser Glu Glu Thr Leu Arg Gly Leu Gly Arg Arg Cys Phe Leu
            100                 105                 110
Gln Thr Leu Asn Ala Thr Leu Gly Cys Val Leu His Arg Leu Ala Asp
        115                 120                 125
Leu Glu Gln Arg Leu Pro Lys Ala Gln Asp Leu Glu Arg Ser Gly Leu
    130                 135                 140
Asn Ile Glu Asp Leu Glu Lys Leu Gln Met Ala Arg Pro Asn Ile Leu
145                 150                 155                 160
Gly Leu Arg Asn Asn Ile Tyr Cys Met Ala Gln Leu Leu Asp Asn Ser
                165                 170                 175
Asp Thr Ala Glu Pro Thr Lys Ala Gly Arg Gly Ala Ser Gln Pro Pro
            180                 185                 190
Thr Pro Thr Pro Ala Ser Asp Ala Phe Gln Arg Lys Leu Glu Gly Cys
        195                 200                 205
Arg Phe Leu His Gly Tyr His Arg Phe Met His Ser Val Gly Arg Val
    210                 215                 220
Phe Ser Lys Trp Gly Glu Ser Pro Asn Arg Ser Arg Arg His Ser Pro
225                 230                 235                 240
His Gln Ala Leu Arg Lys Gly Val Arg Arg Thr Arg Pro Ser Arg Lys
                245                 250                 255
Gly Lys Arg Leu Met Thr Arg Gly Gln Leu Pro Arg
            260                 265         268
```

<210> 1349
<211> 138
<212>Amino acid
<213> Homo sapiens

<400> 1349

```
Asp Phe Pro Gly Arg Arg Phe Arg Leu Val Trp Leu Leu Val Leu Arg
  1               5                  10                  15
Leu Pro Trp Arg Val Pro Gly Gln Leu Asp Pro Thr Thr Gly Arg Arg
             20                  25                  30
Phe Ser Glu His Lys Leu Cys Ala Asp Asp Glu Cys Ser Met Leu Met
```

```
          35                  40                  45
Tyr Arg Gly Glu Ala Leu Glu Asp Phe Thr Gly Pro Asp Cys Arg Phe
      50                  55                  60
Val Asn Phe Lys Lys Gly Asp Pro Val Tyr Val Tyr Tyr Lys Leu Ala
 65                  70                  75                  80
Arg Gly Trp Pro Glu Val Trp Ala Gly Ser Val Gly Arg Thr Phe Gly
                 85                  90                  95
Tyr Phe Pro Lys Asp Leu Ile Gln Val Val His Glu Tyr Thr Lys Glu
            100                 105                 110
Glu Leu Gln Val Pro Thr Asn Glu Thr Asp Phe Val Cys Phe Asp Gly
        115                 120                 125
Gly Arg Asp Asp Phe His Asn Tyr Asn Val
    130                 135         138
```

<210> 1350
<211> 236
<212>Amino acid
<213> Homo sapiens

<400> 1350

```
Ser Pro Leu Gly Lys Glu Gly Gln Glu Glu Val Arg Val Lys Ile Lys
  1               5                  10                  15
Asp Leu Asn Glu His Ile Val Cys Cys Leu Cys Ala Gly Tyr Phe Val
            20                  25                  30
Asp Ala Thr Thr Ile Thr Glu Cys Leu His Thr Phe Cys Lys Ser Cys
        35                  40                  45
Ile Val Lys Tyr Leu Gln Thr Ser Lys Tyr Cys Pro Met Cys Asn Ile
    50                  55                  60
Lys Ile His Glu Thr Gln Pro Leu Leu Asn Leu Lys Leu Asp Arg Val
 65                  70                  75                  80
Met Gln Asp Ile Val Tyr Lys Leu Val Pro Gly Leu Gln Asp Ser Glu
                85                  90                  95
Glu Lys Arg Ile Arg Glu Phe Tyr Gln Ser Arg Gly Leu Asp Arg Val
            100                 105                 110
Thr Gln Pro Thr Gly Glu Glu Pro Ala Leu Ser Asn Leu Gly Leu Pro
        115                 120                 125
Phe Ser Ser Phe Asp His Ser Lys Ala His Tyr Tyr Arg Tyr Asp Glu
    130                 135                 140
Gln Leu Asn Leu Cys Leu Glu Arg Leu Ser Ser Gly Lys Asp Lys Asn
145                 150                 155                 160
Lys Ser Val Leu Gln Asn Lys Tyr Val Arg Cys Ser Val Arg Ala Glu
                165                 170                 175
Val Arg His Leu Arg Arg Val Leu Cys His Arg Leu Met Leu Asn Pro
            180                 185                 190
Gln His Val Gln Leu Leu Phe Asp Asn Glu Val Leu Pro Asp His Met
        195                 200                 205
Thr Met Lys Gln Ile Trp Leu Ser Arg Trp Phe Gly Lys Pro Ser Pro
    210                 215                 220
Leu Leu Leu Gln Tyr Ser Val Lys Glu Lys Arg Arg
225                 230                 235 236
```

<210> 1351
<211> 178
<212>Amino acid
<213> Homo sapiens

<400> 1351

```
Leu Trp Trp Tyr Ser Ala His Ala Ala Val Asp Ala Met Met Asp Val
 1               5                  10                  15
Phe Gly Val Gly Phe Pro Ser Lys Val Pro Trp Lys Lys Met Ser Ala
            20                  25                  30
Glu Glu Leu Glu Asn Gln Tyr Cys Pro Ser Arg Trp Val Val Arg Leu
        35                  40                  45
Gly Ala Glu Glu Ala Leu Arg Thr Tyr Ser Gln Ile Gly Ile Glu Ala
    50                  55                  60
Thr Thr Arg Ala Arg Ala Thr Arg Lys Ser Leu Leu His Val Pro Tyr
65                  70                  75                  80
Gly Asp Gly Glu Gly Glu Lys Val Asp Ile Tyr Phe Pro Asp Glu Ser
                85                  90                  95
Ser Glu Ala Thr Thr Arg Ala Arg Ala Thr Arg Lys Ser Leu Leu His
            100                 105                 110
Val Pro Tyr Gly Asp Gly Glu Gly Glu Lys Val Asp Ile Tyr Phe Pro
        115                 120                 125
Asp Glu Ser Ser Glu Ala Leu Pro Phe Phe Leu Phe Phe His Gly Gly
    130                 135                 140
Tyr Trp Gln Ser Gly Arg His Pro Gly Pro His Gly Arg Pro Gly Asp
145                 150                 155                 160
Pro Gln Arg Cys Val Cys Pro Glu Ala Val Ser Lys Gln Gln Ala Phe
                165                 170                 175
Ser Trp
    178
```

<210> 1352
<211> 284
<212>Amino acid
<213> Homo sapiens

<400> 1352

```
Gly Val Arg Met Ala Ser Arg Gly Arg Arg Pro Glu His Gly Gly Pro
 1               5                  10                  15
Pro Glu Leu Phe Tyr Asp Glu Thr Glu Ala Arg Lys Tyr Val Arg Asn
            20                  25                  30
Ser Arg Met Ile Asp Ile Gln Thr Arg Met Ala Gly Arg Ala Leu Glu
        35                  40                  45
Leu Leu Tyr Leu Pro Glu Asn Lys Pro Cys Tyr Leu Leu Asp Ile Gly
    50                  55                  60
Cys Gly Thr Gly Leu Ser Gly Ser Tyr Leu Ser Asp Glu Gly His Tyr
65                  70                  75                  80
Trp Val Gly Leu Asp Ile Ser Pro Ala Met Leu Asp Glu Ala Val Asp
                85                  90                  95
Arg Glu Ile Glu Gly Asp Leu Leu Leu Gly Asp Met Gly Gln Gly Ile
            100                 105                 110
Pro Phe Lys Pro Gly Thr Phe Asp Gly Cys Ile Ser Ile Ser Ala Val
        115                 120                 125
Gln Trp Leu Cys Asn Ala Asn Lys Lys Ser Glu Asn Pro Ala Lys Arg
    130                 135                 140
Leu Tyr Cys Phe Phe Ala Ser Leu Phe Ser Val Leu Val Arg Gly Ser
145                 150                 155                 160
Arg Ala Val Leu Gln Leu Tyr Pro Glu Asn Ser Glu Gln Leu Glu Leu
                165                 170                 175
Ile Thr Thr Gln Ala Thr Lys Ala Gly Phe Ser Gly Gly Met Val Val
            180                 185                 190
Asp Tyr Pro Asn Ser Ala Lys Ala Lys Lys Phe Tyr Leu Cys Leu Phe
```

```
        195                 200                 205
Ser Gly Pro Ser Thr Phe Ile Pro Glu Gly Leu Ser Glu Asn Gln Asp
    210                 215                 220
Glu Val Glu Pro Arg Glu Ser Val Phe Thr Asn Glu Arg Phe Pro Leu
225                 230                 235                 240
Arg Met Ser Arg Arg Gly Met Val Arg Lys Ser Arg Ala Trp Val Leu
                245                 250                 255
Glu Lys Lys Glu Arg His Arg Arg Gln Gly Arg Glu Val Arg Pro Asp
            260                 265                 270
Thr Gln Tyr Thr Gly Arg Lys Arg Lys Pro Arg Phe
        275                 280             284
```

<210> 1353
<211> 363
<212>Amino acid
<213> Homo sapiens

<400> 1353

```
Thr Leu Ile Cys Arg Met Ala Gly Cys Gly Glu Ile Asp His Ser Ile
  1               5                  10                  15
Asn Met Leu Pro Thr Asn Arg Lys Ala Asn Glu Ser Cys Ser Asn Thr
            20                  25                  30
Ala Pro Ser Leu Thr Val Pro Glu Cys Ala Ile Cys Leu Gln Thr Cys
        35                  40                  45
Val His Pro Val Ser Leu Pro Cys Lys His Val Phe Cys Tyr Leu Cys
    50                  55                  60
Val Lys Gly Ala Ser Trp Leu Gly Lys Arg Cys Ala Leu Cys Arg Gln
65                  70                  75                  80
Glu Ile Pro Glu Asp Phe Leu Asp Lys Pro Thr Leu Leu Ser Pro Glu
                85                  90                  95
Glu Leu Lys Ala Ala Ser Arg Gly Asn Gly Glu Tyr Ala Trp Tyr Tyr
            100                 105                 110
Glu Gly Arg Asn Gly Trp Trp Gln Tyr Asp Glu Arg Thr Ser Arg Glu
        115                 120                 125
Leu Glu Asp Ala Phe Ser Lys Gly Lys Lys Asn Thr Glu Met Leu Ile
    130                 135                 140
Ala Gly Phe Leu Tyr Val Ala Asp Leu Glu Asn Met Val Gln Tyr Arg
145                 150                 155                 160
Arg Asn Glu His Gly Arg Arg Arg Lys Ile Lys Arg Asp Ile Ile Asp
                165                 170                 175
Ile Pro Lys Lys Gly Val Ala Gly Leu Arg Leu Asp Cys Asp Ala Asn
            180                 185                 190
Thr Val Asn Leu Ala Arg Glu Ser Ser Ala Asp Gly Ala Asp Ser Val
        195                 200                 205
Ser Ala Gln Ser Gly Ala Ser Val Gln Pro Leu Val Ser Ser Val Arg
    210                 215                 220
Pro Leu Thr Ser Val Asp Gly Gln Leu Thr Ser Pro Ala Thr Pro Ser
225                 230                 235                 240
Pro Asp Ala Ser Thr Ser Leu Glu Asp Ser Phe Ala His Leu Gln Leu
                245                 250                 255
Ser Gly Asp Asn Thr Ala Glu Arg Ser His Arg Gly Glu Gly Glu Glu
            260                 265                 270
Asp His Glu Ser Pro Ser Ser Gly Arg Val Pro Ala Pro Asp Thr Ser
        275                 280                 285
Ile Glu Glu Thr Glu Ser Asp Ala Ser Ser Asp Ser Glu Asp Val Ser
    290                 295                 300
Ala Val Val Ala Gln His Ser Leu Thr Gln Gln Arg Leu Leu Val Ser
305                 310                 315                 320
Asn Ala Asn Gln Thr Val Pro Asp Arg Ser Asp Arg Ser Gly Thr Asp
```

```
                325                 330                 335
Arg Ser Val Ala Gly Gly Gly Thr Val Ser Val Ser Val Arg Ser Arg
            340                 345                 350
Arg Pro Asp Gly Gln Cys Thr Val Thr Glu Val
        355                 360         363
```

<210> 1354
<211> 368
<212>Amino acid
<213> Homo sapiens

<400> 1354

```
Gly Ala Thr Pro Leu Gly Ser Val Gly Gly Arg Thr Gly Lys Met Asp
  1               5                  10                  15
Ala Ala Thr Leu Thr Tyr Asp Thr Leu Arg Phe Ala Glu Phe Glu Asp
             20                  25                  30
Phe Pro Glu Thr Ser Glu Pro Val Trp Ile Leu Gly Arg Lys Tyr Ser
         35                  40                  45
Ile Phe Thr Glu Lys Asp Glu Ile Leu Ser Asp Val Ala Ser Arg Leu
     50                  55                  60
Trp Phe Thr Tyr Arg Lys Asn Phe Pro Ala Ile Gly Gly Thr Gly Pro
 65                  70                  75                  80
Thr Ser Asp Thr Gly Trp Gly Cys Met Leu Arg Cys Gly Gln Met Ile
                 85                  90                  95
Phe Ala Gln Ala Leu Val Cys Arg His Leu Gly Arg Asp Trp Arg Trp
            100                 105                 110
Thr Gln Arg Lys Arg Gln Pro Asp Ser Tyr Phe Ser Val Leu Asn Ala
        115                 120                 125
Phe Ile Asp Arg Lys Asp Ser Tyr Tyr Ser Ile His Gln Ile Ala Gln
    130                 135                 140
Met Gly Val Gly Glu Gly Lys Ser Ile Gly Gln Trp Tyr Gly Pro Asn
145                 150                 155                 160
Thr Val Ala Gln Val Leu Lys Lys Leu Ala Val Phe Asp Thr Trp Ser
                165                 170                 175
Ser Leu Ala Val His Ile Ala Met Asp Asn Thr Val Val Met Glu Glu
            180                 185                 190
Ile Arg Arg Leu Cys Arg Thr Ser Val Pro Cys Ala Gly Ala Thr Ala
        195                 200                 205
Phe Pro Ala Asp Ser Asp Arg His Cys Asn Gly Phe Pro Ala Gly Ala
    210                 215                 220
Glu Val Thr Asn Arg Pro Ser Pro Trp Arg Pro Leu Val Leu Leu Ile
225                 230                 235                 240
Pro Leu Arg Leu Gly Leu Thr Asp Ile Asn Glu Ala Tyr Val Glu Thr
                245                 250                 255
Leu Lys His Cys Phe Met Met Pro Gln Ser Leu Gly Val Ile Gly Gly
            260                 265                 270
Lys Pro Asn Ser Ala His Tyr Phe Ile Gly Tyr Val Gly Glu Glu Leu
        275                 280                 285
Ile Tyr Leu Asp Pro His Thr Thr Gln Pro Ala Val Glu Pro Thr Asp
    290                 295                 300
Gly Cys Phe Ile Pro Asp Glu Ser Phe His Cys Gln His Pro Pro Cys
305                 310                 315                 320
Arg Met Ser Ile Ala Glu Leu Asp Pro Ser Ile Ala Val Val Arg Gly
                325                 330                 335
Gly His Leu Ser Thr Gln Ala Phe Gly Ala Glu Cys Cys Leu Gly Met
            340                 345                 350
Thr Arg Lys Thr Phe Gly Phe Leu Arg Phe Phe Phe Ser Met Leu Gly
        355                 360                 365         368
```

<210> 1355
<211> 117
<212>Amino acid
<213> Homo sapiens

<400> 1355

```
Pro Thr Thr Ser Asn Arg Ala Ile Thr Leu Thr Ala Trp Pro Lys Ile
  1               5                  10                  15
Pro Phe Leu Gly Ile Cys Glu Ala Lys Asn Pro Arg Ser Glu Asn Met
             20                  25                  30
Arg Leu Ala Thr Ile Leu Glu Val Ala Cys His His Leu Gly Ser Gly
         35                  40                  45
Pro Pro Pro Ser Trp Glu Leu Trp Glu Gln Gly Pro Pro Gly Asn Ser
     50                  55                  60
Ser Arg Tyr Ile Glu Phe Leu Asn Lys His Thr Tyr Ile Lys Gly Thr
 65                  70                  75                  80
Leu Arg Val Tyr Thr Lys Lys Phe Cys Met Leu Val Ile Lys Ser Phe
                 85                  90                  95
Glu Ser Lys Ser Cys Val Cys Val Tyr Asp Phe Asp Ser Lys Ser Ser
            100                 105                 110
Val Asn Val Thr Val
        115     117
```

<210> 1356
<211> 126
<212>Amino acid
<213> Homo sapiens

<400> 1356

```
Pro Arg Val Arg Phe Arg Leu Leu His Val Thr Ser Ile Arg Ser Ala
  1               5                  10                  15
Trp Ile Leu Cys Gly Ile Ile Trp Ile Leu Ile Met Ala Ser Ser Ile
             20                  25                  30
Met Leu Leu Asp Ser Gly Ser Glu Gln Asn Gly Ser Val Thr Ser Cys
         35                  40                  45
Leu Glu Leu Asn Leu Tyr Lys Ile Ala Lys Leu Gln Thr Val Asn Tyr
     50                  55                  60
Ile Ala Leu Val Val Gly Cys Leu Leu Pro Phe Phe Thr Leu Ser Ile
 65                  70                  75                  80
Cys Tyr Leu Leu Ile Ile Arg Val Leu Leu Lys Val Glu Val Pro Glu
                 85                  90                  95
Ser Gly Leu Arg Val Ser His Arg Lys Ala Leu Thr Thr Ile Ile Ile
            100                 105                 110
Thr Leu Ile Ile Phe Phe Leu Cys Phe Leu Pro Tyr His Thr
        115                 120                 125 126
```

<210> 1357
<211> 222
<212>Amino acid
<213> Homo sapiens

<400> 1357

```
Gly Arg His Trp Leu Gly Ser Ala Gln Leu Thr Asp Gly Gly Ser Ala
 1               5                  10                  15
Arg Lys Pro Lys Met Ala Val Pro Ala Ala Leu Ile Leu Arg Glu Ser
            20                  25                  30
Pro Ser Met Lys Lys Ala Val Ser Leu Ile Asn Ala Ile Asp Thr Gly
        35                  40                  45
Arg Phe Pro Arg Leu Leu Thr Arg Ile Leu Gln Lys Leu His Leu Lys
    50                  55                  60
Ala Glu Ser Ser Phe Ser Glu Glu Glu Glu Glu Lys Leu Gln Ala Ala
65                  70                  75                  80
Phe Ser Leu Glu Lys Gln Asp Leu His Leu Val Leu Glu Thr Ile Ser
                85                  90                  95
Phe Ile Leu Glu Gln Ala Val Tyr His Asn Val Lys Pro Ala Ala Leu
            100                 105                 110
Gln Gln Gln Leu Glu Asn Ile His Leu Arg Gln Asp Lys Ala Glu Ala
        115                 120                 125
Phe Val Asn Thr Trp Ser Ser Met Gly Gln Glu Thr Val Glu Lys Phe
    130                 135                 140
Arg Gln Arg Ile Leu Ala Pro Cys Lys Leu Glu Thr Val Gly Trp Gln
145                 150                 155                 160
Leu Asn Leu Gln Met Ala His Ser Ala Gln Ala Lys Leu Lys Ser Pro
                165                 170                 175
Gln Ala Val Leu Gln Leu Gly Val Asn Asn Glu Asp Ser Lys Ser Leu
            180                 185                 190
Glu Lys Val Leu Val Glu Phe Ser His Lys Glu Leu Phe Asp Phe Tyr
        195                 200                 205
Asn Lys Leu Glu Thr Ile Gln Ala Gln Leu Asp Ser Leu Thr
    210                 215                 220     222
```

<210> 1358
<211> 116
<212>Amino acid
<213> Homo sapiens

<400> 1358

```
Glu Ala Ser Ser Ala Lys Thr Lys Arg Lys Glu Glu Lys Gly Pro Lys
 1               5                  10                  15
Ala Lys Met Lys Leu Met Val Leu Val Phe Thr Ile Gly Leu Thr Leu
            20                  25                  30
Leu Leu Gly Val Gln Ala Met Pro Ala Asn Arg Leu Ser Cys Tyr Arg
        35                  40                  45
Lys Ile Leu Lys Asp His Asn Cys His Asn Leu Pro Glu Gly Val Ala
    50                  55                  60
Asp Leu Thr Gln Ile Asp Val Asn Val Gln Asp His Phe Trp Asp Gly
65                  70                  75                  80
Lys Gly Cys Glu Met Ile Cys Tyr Cys Asn Phe Ser Glu Leu Leu Cys
                85                  90                  95
Cys Pro Lys Asp Val Phe Phe Gly Pro Lys Ile Ser Phe Val Ile Pro
            100                 105                 110
Cys Asn Asn Gln
        115 116
```

<210> 1359

<211> 466
<212>Amino acid
<213> Homo sapiens

<400> 1359

```
Lys Met Ala Glu Ala Val Phe His Ala Pro Lys Arg Lys Arg Arg Val
 1               5                  10                  15
Tyr Glu Thr Tyr Glu Ser Pro Leu Pro Ile Pro Phe Gly Gln Asp His
            20                  25                  30
Gly Pro Leu Lys Glu Phe Lys Ile Phe Arg Ala Glu Met Ile Asn Asn
        35                  40                  45
Asn Val Ile Val Arg Asn Ala Glu Asp Ile Glu Gln Leu Tyr Gly Lys
    50                  55                  60
Gly Tyr Phe Gly Lys Gly Ile Leu Ser Arg Ser Arg Pro Ser Phe Thr
65                  70                  75                  80
Ile Ser Asp Pro Lys Leu Val Ala Lys Trp Lys Asp Met Lys Thr Asn
                85                  90                  95
Met Pro Ile Ile Thr Ser Lys Arg Tyr Gln His Ser Val Glu Trp Ala
            100                 105                 110
Ala Glu Leu Met Arg Arg Gln Gly Gln Asp Glu Ser Thr Val Arg Arg
        115                 120                 125
Ile Leu Lys Asp Tyr Thr Lys Pro Leu Glu His Pro Pro Val Lys Arg
    130                 135                 140
Asn Glu Glu Ala Gln Val His Asp Lys Leu Asn Ser Gly Met Val Ser
145                 150                 155                 160
Asn Met Glu Gly Thr Ala Gly Gly Glu Arg Pro Ser Val Val Asn Gly
                165                 170                 175
Asp Ser Gly Lys Ser Gly Gly Val Gly Asp Pro Arg Glu Pro Leu Gly
            180                 185                 190
Cys Leu Gln Glu Gly Ser Gly Cys His Pro Thr Thr Glu Ser Phe Glu
        195                 200                 205
Lys Ser Val Arg Glu Asp Ala Ser Pro Leu Pro His Val Cys Cys Cys
    210                 215                 220
Lys Gln Asp Ala Leu Ile Leu Gln Arg Gly Leu His His Glu Asp Gly
225                 230                 235                 240
Ser Gln His Ile Gly Leu Leu His Pro Gly Asp Arg Gly Pro Asp His
                245                 250                 255
Glu Tyr Val Leu Val Glu Glu Ala Glu Cys Ala Met Ser Glu Arg Glu
            260                 265                 270
Ala Ala Pro Asn Glu Glu Leu Val Gln Arg Asn Arg Leu Ile Cys Arg
        275                 280                 285
Arg Asn Pro Tyr Arg Ile Phe Glu Tyr Leu Gln Leu Ser Leu Glu Glu
    290                 295                 300
Ala Phe Phe Leu Val Tyr Ala Leu Gly Cys Leu Ser Ile Tyr Tyr Glu
305                 310                 315                 320
Lys Glu Pro Leu Thr Ile Val Lys Leu Trp Lys Ala Phe Thr Val Val
                325                 330                 335
Gln Pro Thr Phe Arg Thr Thr Tyr Met Ala Tyr His Tyr Phe Arg Ser
            340                 345                 350
Lys Gly Trp Val Pro Lys Val Gly Leu Lys Tyr Gly Thr Asp Leu Leu
        355                 360                 365
Leu Tyr Arg Lys Gly Pro Pro Phe Tyr His Ala Ser Tyr Ser Val Ile
    370                 375                 380
Ile Glu Leu Val Asp Asp His Phe Glu Gly Ser Leu Arg Arg Pro Leu
385                 390                 395                 400
Ser Trp Lys Ser Leu Ala Ala Leu Ser Arg Val Ser Val Asn Val Ser
                405                 410                 415
Lys Glu Leu Met Leu Cys Tyr Leu Ile Lys Pro Ser Thr Met Thr Asp
            420                 425                 430
Lys Glu Met Glu Ser Pro Glu Cys Met Lys Arg Ile Lys Val Gln Glu
```

```
        435                 440                 445
Val Ile Leu Ser Arg Trp Val Ser Ser Arg Glu Arg Ser Asp Gln Asp
    450                 455                 460
Asp Leu
465 466
```

<210> 1360
<211> 419
<212>Amino acid
<213> Homo sapiens

<400> 1360

```
Arg Asp Ile Trp Thr Met Asn Leu Gln Arg Tyr Trp Gly Glu Ile Pro
  1               5                  10                  15
Ile Ser Ser Ser Gln Thr Asn Arg Ser Ser Phe Asp Leu Leu Pro Arg
            20                  25                  30
Glu Phe Arg Leu Val Glu Val His Asp Pro Pro Leu His Gln Pro Ser
        35                  40                  45
Ala Asn Lys Pro Lys Pro Pro Thr Met Leu Asp Ile Pro Ser Glu Pro
    50                  55                  60
Cys Ser Leu Thr Ile His Thr Ile Gln Leu Ile Gln His Asn Arg Arg
65                  70                  75                  80
Leu Arg Asn Leu Ile Ala Thr Ala Gln Ala Gln Asn Gln Gln Gln Thr
                85                  90                  95
Glu Gly Val Lys Thr Glu Glu Ser Glu Pro Leu Pro Ser Cys Pro Gly
            100                 105                 110
Ser Pro Pro Leu Pro Asp Asp Leu Leu Pro Leu Asp Cys Lys Asn Pro
        115                 120                 125
Asn Ala Pro Phe Gln Ile Arg His Ser Asp Pro Glu Ser Asp Phe Tyr
    130                 135                 140
Arg Gly Lys Gly Glu Pro Val Thr Glu Leu Ser Trp His Ser Cys Arg
145                 150                 155                 160
Gln Leu Leu Tyr Gln Ala Val Ala Thr Ile Leu Ala His Ala Gly Phe
                165                 170                 175
Asp Cys Ala Asn Glu Ser Val Leu Glu Thr Leu Thr Asp Val Ala His
            180                 185                 190
Glu Tyr Cys Leu Lys Phe Thr Lys Leu Leu Arg Phe Ala Val Asp Arg
        195                 200                 205
Glu Ala Arg Leu Gly Gln Thr Pro Phe Pro Asp Val Met Glu Gln Val
    210                 215                 220
Phe His Glu Val Gly Ile Gly Ser Val Leu Ser Leu Gln Lys Phe Trp
225                 230                 235                 240
Gln His Arg Ile Lys Asp Tyr His Ser Tyr Met Leu Gln Ile Ser Lys
                245                 250                 255
Gln Leu Ser Glu Glu Tyr Glu Arg Ile Val Asn Pro Glu Lys Ala Thr
            260                 265                 270
Glu Asp Ala Lys Pro Val Lys Ile Lys Glu Glu Pro Val Ser Asp Ile
        275                 280                 285
Thr Phe Pro Val Ser Glu Glu Leu Glu Ala Asp Leu Ala Ser Gly Asp
    290                 295                 300
Gln Ser Leu Pro Met Gly Val Leu Gly Ala Gln Ser Glu Arg Phe Pro
305                 310                 315                 320
Ser Asn Leu Glu Val Glu Ala Ser Pro Gln Ala Ser Ser Ala Glu Val
                325                 330                 335
Asn Ala Ser Pro Leu Trp Asn Leu Ala His Val Lys Met Glu Pro Gln
            340                 345                 350
Glu Ser Glu Glu Gly Asn Val Ser Gly His Gly Val Leu Gly Ser Asp
        355                 360                 365
Val Phe Glu Glu Pro Met Ser Gly Met Ser Glu Ala Gly Ile Pro Gln
```

```
    370                 375                 380
Ser Pro Asp Asp Ser Asp Ser Ser Tyr Gly Ser His Ser Thr Asp Ser
385                 390                 395                 400
Leu Met Gly Ser Ser Pro Val Phe Asn Gln Arg Cys Lys Lys Arg Met
            405                 410                 415
Arg Lys Ile
        419
```

<210> 1361
<211> 220
<212>Amino acid
<213> Homo sapiens

<400> 1361

```
Arg Glu Gln Ile Leu Phe Ile Glu Ile Arg Asp Thr Ala Lys Gly Gly
  1               5                  10                  15
Glu Thr Glu Gln Pro Pro Ser Leu Ser Pro Leu His Gly Gly Arg Met
            20                  25                  30
Pro Glu Met Gly Glu Gly Ile Gln Ser Leu Ala Arg Glu Thr Gln Ser
        35                  40                  45
His Arg Gly Arg Arg Gln Gly Trp Asp Ala Thr Trp Val Thr Arg Cys
    50                  55                  60
Arg Glu Ser Leu Asn Arg Gly Gly Ala Gly Ala Gly Lys Arg Ala Gly
65                  70                  75                  80
Ala Leu Ala His His Val Phe Leu Ala Leu Ile Glu Pro Asn Leu Ala
                85                  90                  95
Glu Arg Glu Ala Ser Glu Glu Glu Val Lys Ala Cys Ser Asp Glu Thr
            100                 105                 110
Val Val Ala Asp Leu Leu Val Lys Val Val Tyr Val Leu Gly Ala Ile
        115                 120                 125
Leu Lys Ile Phe Leu Arg Glu Gly Asn Val Leu Asn Gln His Ser Gly
    130                 135                 140
Met Asp Ile Glu Lys Tyr Ser Glu His Tyr Gln His Asp His Ser Pro
145                 150                 155                 160
Gly Ala Glu Asp Asp Ala Ala Gly Gly Gln Leu Arg Pro Thr Ala Gln
                165                 170                 175
Glu Arg Arg His Lys Glu Gly Ser Arg Gly Ser Pro Arg Cys Lys Arg
            180                 185                 190
Ala Arg Lys Ala Val Gly Glu Ser Pro Gly Cys Pro Arg Pro Arg Val
        195                 200                 205
Arg Pro Arg Val Arg Pro Arg Val Arg Pro Arg Val
    210                 215                 220
```

<210> 1362
<211> 82
<212>Amino acid
<213> Homo sapiens

<400> 1362

```
Gly Thr Arg Gly Cys Cys Arg Glu Gly Thr Ala Tyr Ala Lys Ala Tyr
  1               5                  10                  15
Gln Phe Met Ala Ser His Leu Ser Leu Gly Lys Pro Val Ser Thr Gly
            20                  25                  30
Ser Ile Pro Arg Phe Asn Lys Ala Leu Phe Asn Lys Gln Ala Lys Cys
```

```
         35                  40                  45
Lys Pro Asn His Tyr Ser Phe Ile Gly Leu Ser Met Leu Ser Pro Glu
     50                  55                  60
Asn Phe Ser Ile Gly Cys Lys Tyr Ser Val Trp Phe Ser Glu Thr Lys
 65                  70                  75                  80
Gly Phe
     82
```

<210> 1363
<211> 143
<212>Amino acid
<213> Homo sapiens

<400> 1363

```
Gly Ala Gln Gly Val Arg Val Gly Ile Gly Glu Val Gly Arg Val Gln
  1               5                  10                  15
Ala Pro Arg Val Ser Leu Leu His Ser Gln Gly Val Pro Arg Gly Gly
            20                  25                  30
Thr Gly Glu Ala Val Lys Glu Glu Gly Arg Gly Ser Ser Leu His Pro
        35                  40                  45
Pro Leu Pro Pro Gln Gly Leu Gly Glu Tyr Ala Ala Cys Gln Ser His
    50                  55                  60
Ala Phe Met Lys Gly Val Phe Thr Phe Val Thr Gly Thr Gly Met Ala
65                  70                  75                  80
Phe Gly Leu Gln Met Phe Ile Gln Arg Lys Phe Pro Tyr Pro Leu Gln
                85                  90                  95
Trp Ser Leu Leu Val Ala Val Val Ala Gly Ser Val Val Ser Tyr Gly
            100                 105                 110
Val Thr Arg Val Glu Ser Glu Lys Cys Asn Asn Leu Trp Leu Phe Leu
        115                 120                 125
Glu Thr Gly Gln Leu Pro Lys Asp Arg Ser Thr Asp Gln Arg Ser
    130                 135                 140         143
```

<210> 1364
<211> 194
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(194)
<223> X = any amino acid or stop code

<400> 1364

```
Gly Thr Ser Glu Leu Leu Cys Ile Gln Arg Trp Asn Trp Gly Pro Ala
  1               5                  10                  15
Phe Pro Pro Arg Pro Gly Leu Ala Leu Ala Pro Thr Leu Gln Leu Leu
            20                  25                  30
Val Glu Met Gly Ser Ala Lys Ser Val Pro Val Thr Pro Ala Arg Pro
        35                  40                  45
Pro Pro His Asn Lys His Leu Ala Arg Val Ala Asp Pro Arg Ser Pro
    50                  55                  60
Ser Ala Gly Ile Leu Arg Thr Pro Ile Gln Val Glu Ser Ser Pro Gln
65                  70                  75                  80
```

```
Pro Gly Leu Pro Ala Gly Glu Gln Leu Glu Gly Leu Lys His Ala Gln
                 85                  90                  95
Asp Ser Asp Pro Arg Ser Pro Leu Gly Lys Asn Xaa Gly His Gly Trp
            100                 105                 110
Gln Val Gly Gln Gly Ser Asp Leu Gly Ser Pro Gln Pro Leu Pro Pro
        115                 120                 125
Ser Ala Ser His Leu Tyr Ser Ser Arg Ala Ser Arg Cys Ser Gln Pro
    130                 135                 140
Pro Cys Leu Ser Leu Pro Trp Phe Gly Val Arg Ser Ser Pro Ala Asn
145                 150                 155                 160
Thr Tyr His Val Pro Val Thr Ser Leu Cys Pro Ser Pro Ala Leu His
                165                 170                 175
Tyr Thr Ala Leu Gln Ala Gly Ile Ile Ser Thr Ser Gln Ala Arg Ala
            180                 185                 190
Pro Arg
    194
```

<210> 1365
<211> 114
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(114)
<223> X = any amino acid or stop code

<400> 1365

```
Pro Leu Leu Leu Pro Arg Phe Ile Asp Ile Pro Cys Leu Leu Cys Tyr
  1               5                  10                  15
Leu Thr Gln Val Thr Pro Asp Asp Met Tyr Ala Lys Ala Phe Leu Ile
             20                  25                  30
Lys Pro Asn Thr Ala Ile Thr Gly Thr Asp Arg Arg Lys Leu Arg Ala
         35                  40                  45
Asp Glu Thr Thr Asp Phe Pro Thr Leu Gly Thr Asp Gln Ile Tyr Glu
     50                  55                  60
Leu Leu Pro Gly Lys Asp Glu Leu Asn Ile Val Lys Ser Asn Ala His
 65                  70                  75                  80
Lys Arg Asp Ala Xaa Thr Ala Tyr Val Ser Gly Glu Asn His Ile Leu
                 85                  90                  95
Ser Glu Pro Xaa Lys Asn Leu Tyr Pro Ala Val Asn Thr Leu Ser Ser
            100                 105                 110
Tyr Pro
    114
```

<210> 1366
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 1366

```
Ser Arg Gln Pro Pro Pro Leu Leu Thr Met Val Phe Leu Leu Glu Phe
  1               5                  10                  15
Leu Phe Leu Val Phe Phe Pro Gly Cys Val Asn Gln Leu Leu Leu Ser
```

```
            20                  25                  30
Tyr Pro Trp Gln Gly Gln Gly Thr Ser Leu Trp Ser Ser Leu Ser Phe
        35                  40                  45
His Trp Leu Leu Pro Gln Glu Asp Ser Ser Arg Leu Ser Ile Phe Pro
    50                  55                  60
Leu Arg Ala Gly Ser Pro Pro Gln Pro Ala Gln Ala Pro Gln Arg Ile
65                  70                  75                  80
```

<210> 1367
<211> 301
<212>Amino acid
<213> Homo sapiens

<400> 1367

```
Lys Ser Arg Glu Gln Ser Ser Leu Phe Ala Ala Asp Ala Glu Arg Ser
 1               5                  10                  15
Trp Gly Gly Lys Ser Cys Cys Leu Leu Arg Trp Arg Phe Val Gly Lys
            20                  25                  30
Ala Ser His Phe Pro Arg Leu Leu Pro Leu Pro Gly Glu Glu Arg Pro
        35                  40                  45
Glu Thr Lys Glu Arg Ala Trp Lys Met Glu Gln Thr Trp Thr Arg Asp
    50                  55                  60
Tyr Phe Ala Glu Asp Asp Gly Glu Met Val Pro Arg Thr Ser His Thr
65                  70                  75                  80
Ala Ala Ser Val Ser Leu Thr Ala Phe Leu Ser Asp Thr Lys Asp Arg
                85                  90                  95
Gly Pro Pro Val Gln Ser Gln Ile Trp Arg Ser Gly Glu Lys Val Pro
            100                 105                 110
Phe Val Gln Thr Tyr Ser Leu Arg Ala Phe Glu Lys Pro Pro Gln Val
        115                 120                 125
Gln Thr Gln Ala Leu Arg Asp Phe Glu Lys His Leu Asn Asp Leu Lys
    130                 135                 140
Lys Glu Asn Phe Ser Leu Lys Leu Leu Ile Tyr Phe Leu Glu Glu Arg
145                 150                 155                 160
Met Gln Gln Lys Tyr Glu Ala Ser Arg Glu Asp Ile Tyr Lys Arg Asn
                165                 170                 175
Thr Glu Leu Lys Val Glu Val Glu Ser Leu Lys Arg Glu Leu Gln Asp
            180                 185                 190
Lys Lys Gln His Leu Asp Lys Thr Trp Ala Asp Val Glu Asn Leu Asn
        195                 200                 205
Ser Gln Asn Glu Ala Glu Leu Arg Arg Gln Phe Glu Glu Arg Gln Gln
    210                 215                 220
Glu Met Glu His Val Tyr Glu Leu Leu Glu Asn Lys Met Gln Leu Leu
225                 230                 235                 240
Gln Glu Glu Ser Arg Leu Ala Lys Asn Glu Ala Ala Arg Met Ala Ala
                245                 250                 255
Leu Val Glu Ala Glu Lys Glu Cys Asn Leu Glu Leu Ser Glu Lys Leu
            260                 265                 270
Lys Gly Val Thr Lys Asn Trp Glu Asp Val Pro Gly Asp Gln Val Lys
        275                 280                 285
Pro Asp Gln Tyr Thr Glu Ala Leu Ala Gln Arg Asp Lys
    290                 295                 300 301
```

<210> 1368
<211> 308
<212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(308)
<223> X = any amino acid or stop code

<400> 1368

```
Thr Arg Arg Arg Gly Thr Thr Trp Arg Ser Pro Arg Pro Arg Arg Ala
  1               5                  10                  15
Ser Thr Ser Arg Pro Ser Thr Arg Pro Arg Gly Val Ala Ser Trp Pro
             20                  25                  30
Trp Glu Thr Ala Gly Thr Ala Thr Thr Gly Pro Gly Pro Ser Ala Arg
         35                  40                  45
Thr Arg Arg Arg Ala Ala Arg Arg Arg Arg Ser Arg Pro Arg Arg Arg
     50                  55                  60
Ala His Gly Gly Leu Ser Gln Pro Ala Gly Trp Gln Ser Leu Leu Ser
 65                  70                  75                  80
Phe Thr Ile Leu Phe Leu Ala Trp Leu Ala Gly Phe Ser Ser Arg Leu
                 85                  90                  95
Phe Ala Val Ile Arg Phe Glu Ser Ile Ile His Glu Phe Asp Pro Trp
            100                 105                 110
Phe Asn Tyr Arg Ser Thr His His Leu Ala Ser His Gly Phe Tyr Glu
        115                 120                 125
Phe Leu Asn Trp Phe Asp Glu Arg Ala Trp Tyr Pro Leu Gly Arg Ile
    130                 135                 140
Val Gly Gly Thr Val Tyr Pro Gly Leu Met Ile Thr Ala Gly Leu Ile
145                 150                 155                 160
His Trp Ile Leu Asn Thr Leu Asn Ile Thr Val His Ile Arg Asp Val
                165                 170                 175
Cys Val Phe Leu Ala Pro Thr Phe Ser Gly Leu Thr Ser Ile Ser Thr
            180                 185                 190
Phe Leu Leu Thr Arg Glu Leu Trp Asn Gln Gly Ala Gly Leu Leu Ala
        195                 200                 205
Ala Cys Phe Ile Ala Ile Val Pro Gly Tyr Ile Ser Arg Ser Val Ala
    210                 215                 220
Gly Ser Phe Asp Asn Glu Gly Ile Ala Ile Phe Ala Leu Gln Phe Thr
225                 230                 235                 240
Tyr Tyr Leu Trp Val Lys Ser Val Lys Thr Gly Ser Val Phe Trp Thr
                245                 250                 255
Met Cys Cys Cys Leu Ser Tyr Phe Tyr Met Val Ser Ala Trp Gly Gly
            260                 265                 270
Tyr Val Phe Ile Ile Asn Leu Ile Pro Leu His Ala Phe Val Leu Val
        275                 280                 285
Leu Met Gln Arg Tyr Ser Lys Arg Val Tyr Ile Xaa Tyr Ser Thr Phe
    290                 295                 300
Tyr Ile Val Gly
305         308
```

<210> 1369
<211> 212
<212>Amino acid
<213> Homo sapiens

<400> 1369

```
Arg Arg Leu Ile Val Val Leu Ser Asp Ala Phe Leu Ser Arg Ala Trp
 1               5                  10                  15
Cys Ser His Ser Phe Arg Val Gly Pro Ala Arg Gly Trp Val Gly Pro
            20                  25                  30
Ser Val Ala Pro Thr Pro Leu Thr Val Pro Pro Arg Arg Glu Gly Leu
        35                  40                  45
Cys Arg Leu Leu Glu Leu Thr Arg Arg Pro Ile Phe Ile Thr Phe Glu
    50                  55                  60
Gly Gln Arg Arg Asp Pro Ala His Pro Ala Leu Arg Leu Leu Arg Gln
65                  70                  75                  80
His Arg His Leu Val Thr Leu Leu Leu Trp Arg Pro Gly Ser Val Thr
                85                  90                  95
Pro Ser Ser Asp Phe Trp Lys Glu Val Gln Leu Ala Leu Pro Arg Lys
            100                 105                 110
Val Arg Tyr Arg Pro Val Glu Gly Asp Pro Gln Thr Gln Leu Gln Asp
        115                 120                 125
Asp Lys Asp Pro Met Leu Ile Leu Arg Gly Arg Val Pro Glu Gly Arg
    130                 135                 140
Ala Leu Asp Ser Glu Val Asp Pro Asp Pro Glu Gly Asp Leu Gly Val
145                 150                 155                 160
Arg Gly Pro Val Phe Gly Glu Pro Ser Ala Pro Pro His Thr Ser Gly
                165                 170                 175
Val Ser Leu Gly Glu Ser Arg Ser Ser Glu Val Asp Val Ser Asp Leu
            180                 185                 190
Gly Ser Arg Asn Tyr Ser Ala Arg Thr Asp Phe Tyr Cys Leu Val Ser
        195                 200                 205
Lys Asp Asp Met
    210     212
```

<210> 1370
<211> 281
<212>Amino acid
<213> Homo sapiens

<400> 1370

```
Leu Ser His Glu Gly Trp Arg Arg Gly Arg Glu Gly Glu Arg Ile Asn
 1               5                  10                  15
Ser Ser Val Ala Ser Leu Ala Pro Leu Cys Ile Leu Pro Asp Leu Pro
            20                  25                  30
Ser Asn Met His Leu Ala Arg Leu Val Gly Ser Cys Ser Leu Leu Leu
        35                  40                  45
Leu Leu Gly Ala Leu Ser Gly Trp Ala Ala Ser Asp Asp Pro Ile Glu
    50                  55                  60
Lys Val Ile Glu Gly Ile Asn Arg Gly Leu Ser Asn Ala Glu Arg Glu
65                  70                  75                  80
Val Gly Lys Ala Leu Asp Gly Ile Asn Ser Gly Ile Thr His Ala Gly
                85                  90                  95
Arg Glu Val Glu Lys Val Phe Asn Gly Leu Ser Asn Met Gly Ser His
            100                 105                 110
Thr Gly Lys Glu Leu Asp Lys Gly Val Gln Gly Leu Asn His Gly Met
        115                 120                 125
Asp Lys Val Ala His Glu Ile Asn His Gly Ile Gly Gln Ala Gly Lys
    130                 135                 140
Glu Ala Glu Lys Leu Gly His Gly Val Asn Asn Ala Ala Gly Gln Ala
145                 150                 155                 160
Gly Lys Glu Ala Asp Lys Ala Val Gln Gly Phe His Thr Gly Val His
                165                 170                 175
Gln Ala Gly Lys Glu Ala Glu Lys Leu Gly Gln Gly Val Asn His Ala
            180                 185                 190
```

```
Ala Asp Gln Ala Gly Lys Glu Val Glu Lys Leu Gly Gln Gly Ala His
        195                 200                 205
His Ala Ala Gly Gln Ala Gly Lys Glu Leu Gln Asn Ala His Asn Gly
    210                 215                 220
Val Asn Gln Ala Ser Lys Glu Ala Asn Gln Leu Leu Asn Gly Asn His
225                 230                 235                 240
Gln Ser Gly Ser Ser Ser His Gln Gly Gly Ala Thr Thr Thr Pro Leu
                245                 250                 255
Ala Ser Gly Ala Ser Val Asn Thr Pro Phe Ile Asn Leu Pro Ala Leu
            260                 265                 270
Trp Arg Ser Val Ala Asn Ile Met Pro
        275                 280 281
```

<210> 1371
<211> 119
<212>Amino acid
<213> Homo sapiens

<400> 1371

```
Ser Ala Ser Gly Gly Leu Gly Met Thr Val Glu Gly Pro Glu Gly Ser
  1               5                  10                  15
Glu Arg Glu His Arg Pro Pro Glu Lys Pro Pro Arg Pro Pro Arg Pro
            20                  25                  30
Leu His Leu Ser Asp Arg Ser Phe Arg Arg Lys Lys Asp Ser Val Glu
        35                  40                  45
Ser His Pro Thr Trp Val Asp Asp Thr Arg Ile Asp Ala Asp Ala Ile
    50                  55                  60
Val Glu Lys Ile Val Gln Ser Gln Asp Phe Thr Asp Gly Ser Asn Thr
65                  70                  75                  80
Glu Asp Ser Asn Leu Arg Leu Phe Val Ser Arg Asp Gly Ser Ala Thr
                85                  90                  95
Leu Ser Gly Ile Gln Leu Ala Thr Arg Val Ser Ser Gly Val Tyr Glu
            100                 105                 110
Pro Val Val Ile Glu Ser His
        115                 119
```

<210> 1372
<211> 108
<212>Amino acid
<213> Homo sapiens

<400> 1372

```
Glu Arg Ser Gly Trp Pro Gln Pro Glu Gly Thr Val Thr Ala Gln Gly
  1               5                  10                  15
Pro Leu Phe Trp Glu Arg Leu Ser Gly Ala Val Thr Val Ser Ser Gly
            20                  25                  30
Tyr Lys Ala Asp Met Trp Pro Ser Phe Pro Gln Val Arg Val Gly Ser
        35                  40                  45
Phe Leu Phe Gly Ile Leu Phe Phe Ser Phe Gly Ser Ser Ser Leu Pro
    50                  55                  60
Pro Gly Leu Pro Pro Pro Ala Ser Leu Leu Cys Cys Ala Val Gln Trp
65                  70                  75                  80
Gly Ala Arg Ala Leu Phe Leu Pro Cys Leu Lys Glu Arg Ala Leu Gly
                85                  90                  95
```

```
Met Glu Met Arg Asn Asn Thr Leu Ser Phe Arg Gln
            100                 105         108
```

<210> 1373
<211> 209
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(209)
<223> X = any amino acid or stop code

<400> 1373

```
Ser Ser Ser Asn Leu Arg Leu Ser Phe Leu Ile Asn Glu Asn Ile Leu
  1               5                  10                  15
Gly Lys Cys Phe Arg Ser Gly Pro Ser Cys Ala Gly Pro Arg Ile Ser
             20                  25                  30
Pro Leu Ala Ala Gln Tyr Glu Cys Pro Arg Pro Ser Leu Leu Ile Met
         35                  40                  45
Ala Ser Val Pro Lys Thr Asn Lys Ile Glu Pro Arg Ser Tyr Ser Ile
     50                  55                  60
Ile Pro Ser Cys Gly Ile Arg Arg Leu Gly Pro Ala Leu Asn Thr Leu
 65                  70                  75                  80
Ile Phe Gln Ser Lys Arg Phe Gly Pro Arg Gly His Ser Ala Lys Ser
                 85                  90                  95
Ile Glu Gly Ala Pro Arg Gly Lys Gly Arg Gly Arg Ala Val Ala Arg
            100                 105                 110
Leu Ala Ala Asp Arg Pro Pro Ala Pro Lys Ile Gln Leu Arg Ala Phe
        115                 120                 125
Xaa Leu Gln Gln Leu Xaa Tyr Thr Leu Leu Glu Leu Glu Leu Pro Arg
    130                 135                 140
Leu Leu Ala Pro Asp Leu Pro Ser Asn Gly Ser Ser Leu Lys Asp Leu
145                 150                 155                 160
Lys Trp Thr His Ser Asn Tyr Arg Ala Ser Lys Glu Ser Cys Ile Val
                165                 170                 175
Ile Phe Val Thr Thr Ser Pro Gly Arg Glu Trp Val Ile Cys Ala Leu
            180                 185                 190
Ala Ala Phe Leu Gly Cys Gly Ser Leu Ser Gln Ala Pro Ser Pro Glu
        195                 200                 205
Ser
209
```

<210> 1374
<211> 153
<212>Amino acid
<213> Homo sapiens

<400> 1374

```
Leu Arg Ile Ile Asn Thr Tyr Phe Cys Phe Lys Phe Leu Ile Val Asn
  1               5                  10                  15
Tyr Ile His Gly Thr Thr Lys Ala Arg Lys Pro His Val Leu Gly Glu
             20                  25                  30
Ser Leu Ile Ser Ala Met Ser Arg Gln Glu Pro Lys Met Phe Val Leu
```

```
         35                  40                  45
Leu Tyr Val Thr Ser Phe Ala Ile Cys Ala Ser Gly Gln Pro Arg Gly
     50                  55                  60
Asn Gln Leu Lys Gly Glu Asn Tyr Ser Pro Arg Tyr Ile Cys Ser Ile
 65                  70                  75                  80
Pro Gly Leu Pro Gly Pro Pro Gly Pro Pro Gly Ala Asn Gly Ser Pro
                 85                  90                  95
Gly Pro His Gly Arg Ile Gly Leu Pro Gly Arg Asp Gly Arg Asp Gly
            100                 105                 110
Arg Lys Gly Glu Lys Gly Glu Lys Gly Thr Ala Gly Leu Arg Gly Lys
        115                 120                 125
Thr Gly Pro Leu Gly Leu Ala Gly Glu Lys Gly Asp Gln Gly Glu Thr
    130                 135                 140
Gly Lys Lys Gly Pro Ile Gly Pro Glu
145                 150         153
```

<210> 1375
<211> 149
<212>Amino acid
<213> Homo sapiens

<400> 1375

```
Phe Ala Ser Ala Met Leu Gly Ser Arg Val Asp Arg Pro Lys Leu Ser
  1                 5                  10                  15
Val Ala Pro Ser Val Val Leu Glu Glu Asp Gln Val Leu Val Ser Pro
             20                  25                  30
Ala Val Asp Leu Glu Ala Gly Cys Arg Leu Arg Asp Phe Thr Glu Lys
         35                  40                  45
Ile Met Asn Val Lys Gly Lys Val Ile Leu Ser Met Leu Val Val Ser
     50                  55                  60
Thr Val Ile Ile Val Phe Trp Glu Phe Ile Asn Ser Thr Glu Gly Ser
 65                  70                  75                  80
Phe Leu Trp Ile Tyr His Ser Lys Asn Pro Glu Val Asp Asp Ser Ser
                 85                  90                  95
Ala Gln Lys Gly Trp Trp Phe Leu Ser Trp Phe Asn Asn Gly Ile His
            100                 105                 110
Asn Tyr Gln Gln Gly Glu Glu Asp Ile Asp Lys Glu Lys Gly Arg Glu
        115                 120                 125
Glu Thr Lys Gly Arg Lys Met Thr Gln Gln Ser Phe Gly Tyr Gly Thr
    130                 135                 140
Gly Leu Ile Gln Thr
145             149
```

<210> 1376
<211> 416
<212>Amino acid
<213> Homo sapiens

<400> 1376

```
Gly Ser His Arg Phe Ser Leu Ala Ser Pro Leu Asp Pro Glu Val Gly
  1                 5                  10                  15
Pro Tyr Cys Asp Thr Pro Thr Met Arg Thr Leu Phe Asn Leu Leu Trp
             20                  25                  30
Leu Ala Leu Ala Cys Ser Pro Val His Thr Thr Leu Ser Lys Ser Asp
```

```
         35                  40                  45
Ala Lys Lys Ala Ala Ser Lys Thr Leu Leu Glu Lys Ser Gln Phe Ser
     50                  55                  60
Asp Lys Pro Val Gln Asp Arg Gly Leu Val Val Thr Asp Leu Lys Ala
 65                  70                  75                  80
Glu Ser Val Val Leu Glu His Arg Ser Tyr Cys Ser Ala Lys Ala Arg
                 85                  90                  95
Asp Arg His Phe Ala Gly Asp Val Leu Gly Tyr Val Thr Pro Trp Asn
            100                 105                 110
Ser His Gly Tyr Asp Val Thr Lys Val Phe Gly Ser Lys Phe Thr Gln
        115                 120                 125
Ile Ser Pro Val Trp Leu Gln Leu Lys Arg Arg Gly Arg Glu Met Phe
    130                 135                 140
Glu Val Thr Gly Leu His Asp Val Asp Gln Gly Trp Met Arg Ala Val
145                 150                 155                 160
Arg Lys His Ala Lys Gly Leu His Ile Val Pro Arg Leu Leu Phe Glu
                165                 170                 175
Asp Trp Thr Tyr Asp Asp Phe Arg Asn Val Leu Asp Ser Glu Asp Glu
            180                 185                 190
Ile Glu Glu Leu Ser Lys Thr Val Val Gln Val Ala Lys Asn Gln His
        195                 200                 205
Phe Asp Gly Phe Val Val Glu Val Trp Asn Gln Leu Leu Ser Gln Lys
    210                 215                 220
Arg Val Gly Leu Ile His Met Leu Thr His Leu Ala Glu Ala Leu His
225                 230                 235                 240
Gln Ala Arg Leu Leu Ala Leu Leu Val Ile Pro Pro Ala Ile Thr Pro
                245                 250                 255
Gly Thr Asp Gln Leu Gly Met Phe Thr His Lys Glu Phe Glu Gln Leu
            260                 265                 270
Ala Pro Val Leu Asp Gly Phe Ser Leu Met Thr Tyr Asp Tyr Ser Thr
        275                 280                 285
Ala His Gln Pro Gly Pro Asn Ala Pro Leu Ser Trp Val Arg Ala Cys
    290                 295                 300
Val Gln Val Leu Asp Pro Lys Ser Lys Trp Arg Ser Lys Ile Leu Leu
305                 310                 315                 320
Gly Leu Asn Phe Tyr Gly Met Asp Tyr Ala Thr Ser Lys Asp Ala Arg
                325                 330                 335
Glu Pro Val Val Gly Ala Arg Tyr Ile Gln Thr Leu Lys Asp His Arg
            340                 345                 350
Pro Arg Met Val Trp Asp Ser Gln Val Ser Glu His Phe Phe Glu Tyr
        355                 360                 365
Lys Lys Ser Arg Ser Gly Arg His Val Val Phe Tyr Pro Thr Leu Lys
    370                 375                 380
Ser Leu Gln Val Arg Leu Glu Leu Ala Arg Glu Leu Gly Val Gly Val
385                 390                 395                 400
Ser Ile Trp Glu Leu Gly Gln Gly Leu Asp Tyr Phe Tyr Asp Leu Leu
                405                 410                 415 416
```

<210> 1377
<211> 316
<212>Amino acid
<213> Homo sapiens

<400> 1377

```
Gly Arg Glu Gly Thr Gly Trp Gly Pro Ala Met Ser Glu Val Thr Arg
  1               5                  10                  15
Ser Leu Leu Gln Arg Trp Gly Ala Ser Phe Arg Arg Gly Ala Asp Phe
```

```
            20                  25                  30
Asp Ser Trp Gly Gln Leu Val Glu Ala Ile Asp Glu Tyr Gln Ile Leu
        35                  40                  45
Ala Arg His Leu Gln Lys Glu Ala Gln Ala Gln His Asn Asn Ser Glu
    50                  55                  60
Phe Thr Glu Glu Gln Lys Lys Thr Ile Gly Lys Ile Ala Thr Cys Leu
65                  70                  75                  80
Glu Leu Arg Ser Ala Ala Leu Gln Ser Thr Gln Ser Gln Glu Glu Phe
                85                  90                  95
Lys Leu Glu Asp Leu Lys Lys Leu Glu Pro Ile Leu Lys Asn Ile Leu
            100                 105                 110
Thr Tyr Asn Lys Glu Phe Pro Phe Asp Val Gln Pro Val Pro Leu Arg
        115                 120                 125
Arg Ile Leu Ala Pro Gly Glu Glu Glu Asn Leu Glu Phe Glu Glu Asp
    130                 135                 140
Glu Glu Glu Gly Gly Ala Gly Ala Gly Ser Pro Asp Ser Phe Pro Ala
145                 150                 155                 160
Arg Val Pro Gly Thr Leu Leu Pro Arg Leu Pro Ser Glu Pro Gly Met
                165                 170                 175
Thr Leu Leu Thr Ile Arg Ile Glu Lys Ile Gly Leu Lys Asp Ala Gly
            180                 185                 190
Gln Cys Ile Asn Pro Tyr Ile Thr Val Ser Val Lys Asp Leu Asn Gly
        195                 200                 205
Ile Asp Leu Thr Pro Val Gln Asp Thr Pro Val Ala Ser Arg Lys Glu
    210                 215                 220
Asp Thr Tyr Val His Phe Asn Val Asp Ile Glu Leu Gln Lys His Val
225                 230                 235                 240
Glu Lys Leu Thr Lys Gly Ala Ala Ile Phe Phe Glu Phe Lys His Tyr
                245                 250                 255
Lys Pro Lys Lys Arg Phe Thr Ser Thr Lys Cys Phe Ala Phe Met Glu
            260                 265                 270
Met Asp Glu Ile Lys Leu Gly Pro Ile Val Ile Glu Leu Tyr Lys Lys
        275                 280                 285
Pro Thr Asp Phe Lys Arg Lys Gln Leu Gln Leu Leu Thr Lys Lys Pro
    290                 295                 300
Leu Tyr Leu His Leu His Gln Thr Leu His Lys Glu
305                 310                 315 316
```

<210> 1378
<211> 90
<212>Amino acid
<213> Homo sapiens

<400> 1378

```
Gly Ser Ile Thr Ser Glu Pro Ser Leu Asp Ser Leu Gln Pro Leu Pro
  1                 5                  10                  15
Pro Gly Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp
            20                  25                  30
Tyr Arg Arg Pro Pro Pro Gly Leu Ala Tyr Phe Cys Ile Phe Ser Arg
        35                  40                  45
Asp Glu Val Ser Pro Cys Trp Pro Gly Cys Ser Pro Ser Pro Asp Leu
    50                  55                  60
Met Ile Arg Leu Pro Arg Pro Pro Ser Val Gly Ile Thr Gly Val Ser
65                  70                  75                  80
His Arg Ala Trp Pro Thr Ile Asp Asn Phe
                85                  90
```

<210> 1379

<211> 332
<212>Amino acid
<213> Homo sapiens

<400> 1379

```
Lys Met Pro Val Pro Trp Phe Leu Leu Ser Leu Ala Leu Gly Arg Ser
  1               5                  10                  15
Pro Val Val Leu Ser Leu Glu Arg Leu Val Gly Pro Gln Asp Ala Thr
             20                  25                  30
His Cys Ser Pro Gly Leu Ser Cys Arg Leu Trp Asp Ser Asp Ile Leu
         35                  40                  45
Cys Leu Pro Gly Asp Ile Val Pro Ala Pro Gly Pro Val Leu Ala Pro
     50                  55                  60
Thr His Leu Gln Thr Glu Leu Val Leu Arg Cys Gln Lys Glu Thr Asp
 65                  70                  75                  80
Cys Asp Leu Cys Leu Arg Val Ala Val His Leu Ala Val His Gly His
                 85                  90                  95
Trp Glu Glu Pro Glu Asp Glu Glu Lys Phe Gly Gly Ala Ala Asp Ser
            100                 105                 110
Gly Val Glu Glu Pro Arg Asn Ala Ser Leu Gln Ala Gln Val Val Leu
        115                 120                 125
Ser Phe Gln Ala Tyr Pro Thr Ala Arg Cys Val Leu Leu Glu Val Gln
    130                 135                 140
Val Pro Ala Ala Leu Val Gln Phe Gly Gln Ser Val Gly Ser Val Val
145                 150                 155                 160
Tyr Asp Cys Phe Glu Ala Ala Leu Gly Ser Glu Val Arg Ile Trp Ser
                165                 170                 175
Tyr Thr Gln Pro Arg Tyr Glu Lys Glu Leu Asn His Thr Gln Gln Leu
            180                 185                 190
Pro Asp Cys Arg Gly Leu Glu Val Trp Asn Ser Ile Pro Ser Cys Trp
        195                 200                 205
Ala Leu Pro Trp Leu Asn Val Ser Ala Asp Gly Asp Asn Val His Leu
    210                 215                 220
Val Leu Asn Val Ser Glu Glu Gln His Phe Gly Leu Ser Leu Tyr Trp
225                 230                 235                 240
Asn Gln Val Gln Gly Pro Pro Lys Pro Arg Trp His Lys Asn Leu Val
                245                 250                 255
Arg Pro Pro Pro Ser Gln Val His Ser His Cys Arg Pro Cys Leu Cys
            260                 265                 270
Lys Asp Ala Val Pro Tyr Gln Arg Gly Ser Leu Lys Arg Thr His Pro
        275                 280                 285
Lys Gln Gly Lys Ile Gly Gly Gly Thr Ser Ala Phe Leu Val Ser Leu
    290                 295                 300
Thr Leu Ala Ser Ser Ser Ser Ser Leu Ser Ser Pro Thr Ser Phe Leu
305                 310                 315                 320
Tyr Leu Phe His Arg Leu Asp Arg Arg Ser Leu Pro
                325                 330     332
```

<210> 1380
<211> 117
<212>Amino acid
<213> Homo sapiens

<400> 1380

```
Leu Arg Leu Trp Asn Arg Asn Gln Met Met His Asn Ile Ile Val Lys
```

```
  1               5                  10                  15
Glu Leu Ile Val Thr Phe Phe Leu Gly Ile Thr Val Val Gln Met Leu
            20                  25                  30
Ile Ser Val Thr Gly Leu Lys Gly Val Glu Ala Gln Asn Gly Ser Glu
        35                  40                  45
Ser Glu Val Phe Val Gly Lys Tyr Glu Thr Leu Val Phe Tyr Trp Pro
    50                  55                  60
Ser Leu Leu Cys Leu Ala Phe Leu Leu Gly Arg Phe Leu His Met Phe
65                  70                  75                  80
Val Lys Ala Leu Arg Val His Leu Gly Trp Glu Leu Gln Val Glu Glu
                85                  90                  95
Lys Ser Val Leu Glu Val His Gln Gly Glu His Val Lys Gln Leu Leu
            100                 105                 110
Arg Ile Pro Arg Pro
        115     117
```

<210> 1381
<211> 216
<212>Amino acid
<213> Homo sapiens

<400> 1381

```
Lys Val Asn Arg Lys Leu Arg Lys Lys Gly Lys Ile Ser His Asp Lys
  1               5                  10                  15
Arg Lys Lys Ser Arg Ser Lys Ala Ile Gly Ser Asp Thr Ser Asp Ile
            20                  25                  30
Val His Ile Trp Cys Pro Glu Gly Met Lys Thr Ser Asp Ile Lys Glu
        35                  40                  45
Leu Asn Ile Val Leu Pro Glu Phe Glu Lys Thr His Leu Glu His Gln
    50                  55                  60
Gln Arg Ile Glu Ser Lys Val Cys Lys Ala Ala Ile Ala Thr Phe Tyr
65                  70                  75                  80
Val Asn Val Lys Glu Gln Phe Ile Lys Met Leu Lys Glu Ser Gln Met
                85                  90                  95
Leu Thr Asn Leu Lys Arg Lys Asn Ala Lys Met Ile Ser Asp Ile Glu
            100                 105                 110
Lys Lys Arg Gln Arg Met Ile Glu Val Gln Asp Glu Leu Leu Arg Leu
        115                 120                 125
Glu Pro Gln Leu Lys Gln Leu Gln Thr Lys Tyr Asp Glu Leu Lys Glu
    130                 135                 140
Arg Lys Ser Ser Leu Arg Asn Ala Ala Tyr Phe Leu Ser Asn Leu Lys
145                 150                 155                 160
Gln Leu Tyr Gln Asp Tyr Ser Asp Val Gln Ala Gln Glu Pro Asn Val
                165                 170                 175
Lys Glu Thr Tyr Asp Ser Ser Ser Leu Pro Ala Leu Leu Phe Lys Ala
            180                 185                 190
Arg Thr Leu Leu Gly Ala Glu Ser His Leu Arg Asn Ile Asn His Gln
        195                 200                 205
Leu Glu Lys Leu Leu Asp Gln Gly
    210                 215 216
```

<210> 1382
<211> 137
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(137)
<223> X = any amino acid or stop code

<400> 1382
Val Trp Val Ala Met Glu Glu Pro Pro Val Arg Glu Glu Glu Xaa Glu
1 5 10 15
Glu Gly Glu Glu Asp Glu Glu Arg Asp Glu Val Gly Pro Glu Gly Ala
20 25 30
Leu Gly Lys Ser Pro Phe Gln Leu Thr Ala Glu Asp Val Tyr Asp Ile
35 40 45
Ser Tyr Leu Leu Gly Arg Glu Leu Met Ala Leu Gly Ser Asp Pro Arg
50 55 60
Val Thr Gln Leu Gln Phe Lys Val Val Arg Val Leu Glu Met Leu Glu
65 70 75 80
Ala Leu Val Asn Glu Gly Ser Leu Ala Leu Glu Glu Leu Lys Met Glu
85 90 95
Arg Asp His Leu Arg Lys Glu Val Glu Gly Leu Arg Arg Gln Ser Pro
100 105 110
Pro Ala Ser Gly Glu Trp Pro Asp Ser Thr Lys Arg Arg Pro Arg Arg
115 120 125
Lys Lys Arg Lys Arg Cys Cys Gly Tyr
130 135 137

<210> 1383
<211> 90
<212>Amino acid
<213> Homo sapiens

<400> 1383
Pro Arg Asn Asp His Arg Leu Thr Gln Ser Arg Arg Asp Ser Ser Ser
1 5 10 15
Lys Thr Arg Ala Phe Leu Val Pro Arg Phe Leu Pro Ala His Ala Gly
20 25 30
Val Thr Ser Glu Glu Arg Thr Ala Met Lys Arg Glu Gly Gly Ala Ala
35 40 45
His Leu Cys Ser Asp Ser Leu Pro Glu Ser Gln Gln Gln Asp Gly Asn
50 55 60
His Ala Pro Asn Phe Ser Ser His Gly Ser Cys Arg Arg Arg Gln Arg
65 70 75 80
Arg Arg His Asp Lys Ala Leu His Ala Arg
85 90

<210> 1384
<211> 166
<212>Amino acid
<213> Homo sapiens

<400> 1384
Thr His Ala Ser Glu Lys Ser Arg Ala Thr Met Ser Ser Trp Ser Arg
1 5 10 15

```
Gln Arg Pro Lys Ser Pro Gly Gly Ile Gln Pro His Val Ser Arg Thr
            20                  25                  30
Leu Phe Leu Leu Leu Leu Leu Ala Ala Ser Ala Trp Gly Val Thr Leu
        35                  40                  45
Ser Pro Lys Asp Cys Gln Val Phe Arg Ser Asp His Gly Ser Ser Ile
    50                  55                  60
Ser Cys Gln Pro Pro Ala Glu Ile Pro Gly Tyr Leu Pro Ala Asp Thr
65                  70                  75                  80
Val His Leu Ala Val Glu Phe Phe Asn Leu Thr His Leu Pro Ala Asn
                85                  90                  95
Leu Leu Gln Gly Ala Ser Lys Leu Gln Glu Leu His Leu Ser Ser Asn
            100                 105                 110
Gly Leu Glu Ser Leu Ser Pro Glu Phe Leu Arg Pro Val Pro Gln Leu
        115                 120                 125
Arg Val Leu Asp Leu Thr Arg Asn Ala Leu Thr Gly Leu Pro Pro Gly
    130                 135                 140
Leu Phe Gln Ala Ser Ala Thr Leu Asp Thr Leu Val Leu Lys Glu Asn
145                 150                 155                 160
Gln Leu Glu Val Leu Glu
                165 166
```

<210> 1385
<211> 164
<212>Amino acid
<213> Homo sapiens

<400> 1385

```
Glu Arg Pro Arg Ile Met Asp Leu Ala Gly Leu Leu Lys Ser Gln Phe
  1                 5                  10                  15
Leu Cys His Leu Val Phe Cys Tyr Val Phe Ile Ala Ser Gly Leu Ile
            20                  25                  30
Ile Asn Thr Ile Gln Leu Phe Thr Leu Leu Leu Trp Pro Ile Asn Lys
        35                  40                  45
Gln Leu Phe Arg Lys Ile Asn Cys Arg Leu Ser Tyr Cys Ile Ser Ser
    50                  55                  60
Gln Leu Val Met Leu Leu Glu Trp Trp Ser Gly Thr Glu Cys Thr Ile
65                  70                  75                  80
Phe Thr Asp Pro Arg Ala Tyr Leu Lys Tyr Gly Lys Glu Asn Ala Ile
                85                  90                  95
Val Val Leu Asn His Lys Phe Glu Ile Asp Phe Leu Cys Gly Trp Ser
            100                 105                 110
Leu Ser Glu Arg Phe Gly Leu Leu Gly Val Ser Gln Lys Cys Ile Pro
        115                 120                 125
Pro Cys Leu Thr His Phe Phe Gly Ser Ala Pro Pro Leu Val Phe Leu
    130                 135                 140
Leu Leu Val Ile Gln Asn Leu Gln Lys Asn Gln Gln Ser Phe Tyr Leu
145                 150                 155                 160
Met Lys Trp Ser
            164
```

<210> 1386
<211> 289
<212>Amino acid
<213> Homo sapiens

<400> 1386
Met Ile Val Phe Gly Trp Ala Val Phe Leu Ala Ser Arg Ser Leu Gly
1 5 10 15
Gln Gly Leu Leu Leu Thr Leu Glu Glu His Ile Ala His Phe Leu Gly
20 25 30
Thr Gly Gly Ala Ala Thr Thr Met Gly Asn Ser Cys Ile Cys Arg Asp
35 40 45
Asp Ser Gly Thr Asp Asp Ser Val Asp Thr Gln Gln Gln Gln Ala Glu
50 55 60
Asn Ser Ala Val Pro Thr Ala Asp Thr Arg Ser Gln Pro Arg Asp Pro
65 70 75 80
Val Arg Pro Pro Arg Arg Gly Arg Gly Pro His Glu Pro Arg Arg Lys
85 90 95
Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg
100 105 110
Thr Leu Val Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu
115 120 125
His Glu Met Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser
130 135 140
Leu Ile Arg Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile
145 150 155 160
Thr Leu Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln
165 170 175
Lys Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp
180 185 190
Ser Ser His Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys
195 200 205
Leu Ala Glu Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro
210 215 220
Gly Ile Leu Glu Tyr Leu Leu Gln Cys Leu Leu Gln Ser His Pro Thr
225 230 235 240
Val Met Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser
245 250 255
Glu Asn Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val
260 265 270
Thr Leu Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val
275 280 285
Gly
289

<210> 1387
<211> 320
<212>Amino acid
<213> Homo sapiens

<400> 1387
Arg Phe Gly Thr Arg Gly Leu Ala Lys Ser Lys Gly Val Val Leu Met
1 5 10 15
Ala Leu Cys Ala Leu Thr Arg Ala Leu Arg Ser Leu Asn Leu Ala Pro
20 25 30
Pro Thr Val Ala Ala Pro Ala Pro Ser Leu Phe Pro Ala Ala Gln Met
35 40 45
Met Asn Asn Gly Leu Leu Gln Gln Pro Ser Ala Leu Met Leu Leu Pro
50 55 60
Cys Arg Pro Val Leu Thr Ser Val Ala Leu Asn Ala Asn Phe Val Ser
65 70 75 80
Trp Lys Ser Arg Thr Lys Tyr Thr Ile Thr Pro Val Lys Met Arg Lys
85 90 95

```
Ser Gly Gly Arg Asp His Thr Gly Arg Ile Arg Val His Gly Ile Gly
            100                 105                 110
Gly Gly His Lys Gln Arg Tyr Arg Met Ile Asp Phe Leu Arg Phe Arg
        115                 120                 125
Pro Glu Glu Thr Lys Ser Gly Pro Phe Glu Glu Lys Val Ile Gln Val
    130                 135                 140
Arg Tyr Asp Pro Cys Arg Ser Ala Asp Ile Ala Leu Val Ala Gly Gly
145                 150                 155                 160
Ser Arg Lys Arg Trp Ile Ile Ala Thr Glu Asn Met Gln Ala Gly Asp
                165                 170                 175
Thr Ile Leu Asn Ser Asn His Ile Gly Arg Met Ala Val Ala Ala Arg
            180                 185                 190
Glu Gly Asp Ala His Pro Leu Gly Ala Leu Pro Val Gly Thr Leu Ile
        195                 200                 205
Asn Asn Val Glu Ser Glu Pro Gly Arg Gly Ala Gln Tyr Ile Arg Ala
    210                 215                 220
Ala Gly Thr Cys Gly Val Leu Leu Arg Lys Val Asn Gly Thr Ala Ile
225                 230                 235                 240
Ile Gln Leu Pro Ser Lys Arg Gln Met Gln Val Leu Glu Thr Cys Val
                245                 250                 255
Ala Thr Val Gly Arg Val Ser Asn Val Asp His Asn Lys Arg Val Ile
            260                 265                 270
Gly Lys Ala Gly Arg Asn Arg Trp Leu Gly Lys Arg Pro Asn Ser Gly
        275                 280                 285
Arg Trp His Arg Lys Gly Gly Trp Ala Gly Arg Lys Ile Arg Pro Leu
    290                 295                 300
Pro Pro Met Lys Ser Tyr Val Lys Leu Pro Ser Ala Ser Ala Gln Ser
305                 310                 315                 320
```

<210> 1388
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 1388

```
Pro Val Gln Gly Ala Arg Cys Trp Leu Asp Ala Arg Arg Asn Val Arg
  1               5                  10                  15
Val Phe Ser Gly Val Cys Cys Gly Cys Gly Ile His Gly Tyr Trp Ala
             20                  25                  30
Glu Pro Cys Gly Gly Cys Gly Ala Met Glu Gly Leu Arg Ser Ser Val
         35                  40                  45
Glu Leu Asp Pro Glu Leu Thr Pro Gly Lys Leu Asp Glu Glu Met Val
     50                  55                  60
Gly Leu Pro Pro His Asp Ala Ser Pro Gln Val Thr Phe His Ser Leu
 65                  70                  75                  80
Asp Gly Lys Thr Val Val Cys Pro His Phe Met Gly Leu Leu Leu Gly
                 85                  90                  95
Leu Leu Leu Leu Leu Thr Leu Ser Val Arg Asn Gln Leu Cys Val Arg
            100                 105                 110
Gly Glu Arg Gln Leu Ala Glu Thr Leu His Ser Gln Val Lys Glu Lys
        115                 120                 125
Ser Gln Leu Ile Gly Lys Lys Thr Asp Cys Arg Asp
    130                 135                 140
```

<210> 1389
<211> 448

<212>Amino acid
<213> Homo sapiens

<400> 1389

```
Gly Ala Arg Gly Arg Pro Leu Ala Glu Thr Trp Pro Phe Leu Thr Ala
 1               5                  10                  15
Pro Val Leu Pro Gly Gln Leu Gln Ile Thr Glu Pro Thr Met Ala Glu
            20                  25                  30
Lys Gly Asp Cys Ile Ala Ser Val Tyr Gly Tyr Asp Leu Gly Gly Arg
        35                  40                  45
Phe Val Asp Phe Gln Pro Leu Gly Phe Gly Val Asn Gly Leu Val Leu
    50                  55                  60
Ser Ala Val Asp Ser Arg Ala Cys Arg Lys Val Ala Val Lys Lys Ile
65                  70                  75                  80
Ala Leu Ser Asp Ala Arg Ser Met Lys His Ala Leu Arg Glu Ile Lys
                85                  90                  95
Ile Ile Arg Arg Leu Asp His Asp Asn Ile Val Lys Val Tyr Glu Val
            100                 105                 110
Leu Gly Pro Lys Gly Thr Asp Leu Gln Gly Glu Leu Phe Lys Phe Ser
        115                 120                 125
Val Ala Tyr Ile Val Gln Glu Tyr Met Glu Thr Asp Leu Ala Arg Leu
    130                 135                 140
Leu Glu Gln Gly Thr Leu Ala Glu Glu His Ala Lys Leu Phe Met Tyr
145                 150                 155                 160
Gln Leu Leu Arg Gly Leu Lys Tyr Ile His Ser Ala Asn Val Leu His
                165                 170                 175
Arg Asp Leu Lys Pro Ala Asn Ile Phe Ile Ser Thr Glu Asp Leu Val
            180                 185                 190
Leu Lys Ile Gly Asp Phe Gly Leu Ala Arg Ile Val Asp Gln His Tyr
        195                 200                 205
Ser His Lys Gly Tyr Leu Ser Glu Gly Leu Val Thr Lys Trp Tyr Arg
    210                 215                 220
Ser Pro Arg Leu Leu Leu Ser Pro Asn Asn Tyr Thr Lys Ala Ile Asp
225                 230                 235                 240
Met Trp Ala Ala Gly Cys Ile Leu Ala Glu Met Leu Thr Gly Arg Met
                245                 250                 255
Leu Phe Ala Gly Ala His Glu Leu Glu Gln Met Gln Leu Ile Leu Glu
            260                 265                 270
Thr Ile Pro Val Ile Arg Glu Glu Asp Lys Asp Glu Leu Leu Arg Val
        275                 280                 285
Met Pro Ser Phe Val Ser Ser Thr Trp Glu Val Lys Arg Pro Leu Arg
    290                 295                 300
Lys Leu Leu Pro Glu Val Asn Ser Glu Ala Ile Asp Phe Leu Glu Lys
305                 310                 315                 320
Ile Leu Thr Phe Asn Pro Met Asp Arg Leu Thr Ala Glu Met Gly Leu
                325                 330                 335
Gln His Pro Tyr Met Ser Pro Tyr Ser Cys Pro Glu Asp Glu Pro Thr
            340                 345                 350
Ser Gln His Pro Phe Arg Ile Glu Asp Glu Ile Asp Asp Ile Val Leu
        355                 360                 365
Met Ala Ala Asn Gln Ser Gln Leu Ser Asn Trp Asp Thr Cys Ser Ser
    370                 375                 380
Arg Tyr Pro Val Ser Leu Ser Ser Asp Leu Glu Trp Arg Pro Asp Arg
385                 390                 395                 400
Cys Gln Asp Ala Ser Glu Val Gln Arg Asp Pro Arg Ala Gly Ser Ala
                405                 410                 415
Pro Leu Ala Glu Asn Val Gln Val Asp Pro Arg Lys Asp Ser His Ser
            420                 425                 430
Ser Ser Ala Ser Cys Gln Ala Gly Arg Asn Gly Val Ser Arg Tyr Gln
        435                 440                 445         448
```

<210> 1390
<211> 815
<212>Amino acid
<213> Homo sapiens

<400> 1390

```
Met Arg Thr Leu Gly Thr Cys Leu Ala Thr Leu Ala Gly Leu Leu Leu
  1               5                  10                  15
Thr Ala Ala Gly Glu Thr Phe Ser Gly Gly Cys Leu Phe Asp Glu Pro
            20                  25                  30
Tyr Ser Thr Cys Gly Tyr Ser Gln Ser Glu Gly Asp Asp Phe Asn Trp
        35                  40                  45
Glu Gln Val Asn Thr Leu Thr Lys Pro Thr Ser Asp Pro Trp Met Pro
    50                  55                  60
Ser Gly Ser Phe Met Leu Val Asn Ala Ser Gly Arg Pro Glu Gly Gln
65                  70                  75                  80
Arg Ala His Leu Leu Leu Pro Gln Leu Lys Glu Asn Asp Thr His Cys
                85                  90                  95
Ile Asp Phe His Tyr Phe Val Ser Ser Lys Ser Asn Ser Pro Pro Gly
            100                 105                 110
Leu Leu Asn Val Tyr Val Lys Val Asn Asn Gly Pro Leu Gly Asn Pro
        115                 120                 125
Ile Trp Asn Ile Ser Gly Asp Pro Thr Arg Thr Trp Asn Arg Ala Glu
    130                 135                 140
Leu Ala Ile Ser Thr Phe Trp Pro Asn Phe Tyr Gln Val Ile Phe Glu
145                 150                 155                 160
Val Ile Thr Ser Gly His Gln Gly Tyr Leu Ala Ile Asp Glu Val Lys
                165                 170                 175
Val Leu Gly His Pro Cys Thr Arg Thr Pro His Phe Leu Arg Ile Gln
            180                 185                 190
Asn Val Glu Val Asn Ala Gly Gln Phe Ala Thr Phe Gln Cys Ser Ala
        195                 200                 205
Ile Gly Arg Thr Val Ala Gly Asp Arg Leu Trp Leu Gln Gly Ile Asp
    210                 215                 220
Val Arg Asp Ala Pro Leu Lys Glu Ile Lys Val Thr Ser Ser Arg Arg
225                 230                 235                 240
Phe Ile Ala Ser Phe Asn Val Val Asn Thr Thr Lys Arg Asp Ala Gly
                245                 250                 255
Lys Tyr Arg Cys Met Ile Arg Thr Glu Gly Gly Val Gly Ile Ser Asn
            260                 265                 270
Tyr Ala Glu Leu Val Val Lys Glu Pro Pro Val Pro Ile Ala Pro Pro
        275                 280                 285
Gln Leu Ala Ser Val Gly Ala Thr Tyr Leu Trp Ile Gln Leu Asn Ala
    290                 295                 300
Asn Ser Ile Asn Gly Asp Gly Pro Ile Val Ala Arg Glu Val Glu Tyr
305                 310                 315                 320
Cys Thr Ala Ser Gly Ser Trp Asn Asp Arg Gln Pro Val Asp Ser Thr
                325                 330                 335
Ser Tyr Lys Ile Gly His Leu Asp Pro Asp Thr Glu Tyr Glu Ile Ser
            340                 345                 350
Val Leu Leu Thr Arg Pro Gly Glu Gly Gly Thr Gly Ser Pro Gly Pro
        355                 360                 365
Ala Leu Arg Thr Arg Thr Lys Cys Ala Asp Pro Met Arg Gly Pro Arg
    370                 375                 380
Lys Leu Glu Val Val Glu Val Lys Ser Arg Gln Ile Thr Ile Arg Trp
385                 390                 395                 400
```

```
Glu Pro Phe Gly Tyr Asn Val Thr Arg Cys His Ser Tyr Asn Leu Thr
                405                 410                 415
Val His Tyr Cys Tyr Gln Val Gly Gly Gln Glu Gln Val Arg Glu Glu
            420                 425                 430
Val Ser Trp Asp Thr Glu Asn Ser His Pro Gln His Thr Ile Thr Asn
        435                 440                 445
Leu Ser Pro Tyr Thr Asn Val Ser Val Lys Leu Ile Leu Met Asn Pro
    450                 455                 460
Glu Gly Arg Lys Glu Ser Gln Glu Leu Ile Val Gln Thr Asp Glu Asp
465                 470                 475                 480
Leu Pro Gly Ala Val Pro Thr Glu Ser Ile Gln Gly Ser Thr Phe Glu
                485                 490                 495
Glu Lys Ile Phe Leu Gln Trp Arg Glu Pro Thr Gln Thr Tyr Gly Val
            500                 505                 510
Ile Thr Leu Tyr Glu Ile Thr Tyr Lys Ala Val Ser Ser Phe Asp Pro
        515                 520                 525
Glu Ile Asp Leu Ser Asn Gln Ser Gly Arg Val Ser Lys Leu Gly Asn
    530                 535                 540
Glu Thr His Phe Leu Phe Phe Gly Leu Tyr Pro Gly Thr Thr Tyr Ser
545                 550                 555                 560
Phe Thr Ile Arg Ala Ser Thr Ala Lys Gly Phe Gly Pro Pro Ala Thr
                565                 570                 575
Asn Gln Phe Thr Thr Lys Ile Ser Ala Pro Ser Met Pro Ala Tyr Glu
            580                 585                 590
Leu Glu Thr Pro Leu Asn Gln Thr Asp Asn Thr Val Thr Val Met Leu
        595                 600                 605
Lys Pro Ala His Ser Arg Gly Ala Pro Val Ser Val Tyr Gln Ile Val
    610                 615                 620
Val Glu Glu Glu Arg Pro Arg Arg Thr Lys Lys Thr Thr Glu Ile Leu
625                 630                 635                 640
Lys Cys Tyr Pro Val Pro Ile His Phe Gln Asn Ala Ser Leu Leu Asn
                645                 650                 655
Ser Gln Tyr Tyr Phe Ala Ala Glu Phe Pro Ala Asp Ser Leu Gln Ala
            660                 665                 670
Ala Gln Pro Phe Thr Ile Gly Asp Asn Lys Thr Tyr Asn Gly Tyr Trp
        675                 680                 685
Asn Thr Pro Leu Leu Pro Tyr Lys Ser Tyr Arg Ile Tyr Phe Gln Ala
    690                 695                 700
Ala Ser Arg Ala Asn Gly Glu Thr Lys Ile Asp Cys Val Gln Val Ala
705                 710                 715                 720
Thr Lys Gly Ala Ala Thr Pro Lys Pro Val Pro Glu Pro Glu Lys Gln
                725                 730                 735
Thr Asp His Thr Val Lys Ile Ala Gly Val Ile Ala Gly Ile Leu Leu
            740                 745                 750
Phe Val Ile Ile Phe Leu Gly Val Val Leu Val Met Lys Lys Arg Leu
        755                 760                 765
Tyr Lys His Gly Ala Ser Ile Cys Ser Ala Ser Gly Glu Ala Ser Gly
    770                 775                 780
Ser Phe Gln Ser Trp Arg Lys Ala Lys His Lys Gln Ala Cys Pro Met
785                 790                 795                 800
Ala Arg Ala Gly Ala Arg Glu Arg Ala Gly Gly Cys Leu Lys Leu
                805                 810                 815
```

<210> 1391
<211> 142
<212>Amino acid
<213> Homo sapiens

<400> 1391

```
Gly Ile Arg Gln Leu Leu Gln Leu Ser Arg Ala Ser Met Ala Ala Arg
 1               5                  10                  15
Lys Ser Trp Thr Ala Leu Arg Leu Cys Ala Thr Val Val Val Leu Asp
            20                  25                  30
Met Val Val Cys Lys Gly Phe Val Gln Asp Leu Asp Glu Ser Phe Lys
        35                  40                  45
Glu Asn Arg Asn Asp Asp Ile Trp Leu Val His Phe Tyr Ala Pro Trp
    50                  55                  60
Cys Gly His Cys Lys Lys Leu Glu Pro Ile Trp Asn Glu Ala Gly Leu
65                  70                  75                  80
Glu Met Lys Ser Ile Gly Ser Pro Val Lys Ala Gly Lys Met Asp Ala
                85                  90                  95
Thr Ser Tyr Ser Ser Ile Ala Ser Glu Phe Gly Val Arg Gly Tyr Pro
            100                 105                 110
Thr Ile Lys Leu Ala Leu Ile Arg Pro Leu Pro Ser Gln Gln Met Phe
        115                 120                 125
Glu His Met His Lys Arg His Arg Val Phe Phe Val Tyr Val
    130                 135                 140     142
```

<210> 1392
<211> 282
<212>Amino acid
<213> Homo sapiens

<400> 1392

```
Gly Leu Val Ile Val Ile Ser His Phe Ser Pro Ser Pro Gly Leu Leu
 1               5                  10                  15
Pro Ala Thr Gln Ser Pro Ala Met Ser Asp Pro Ile Thr Leu Asn Val
            20                  25                  30
Gly Gly Lys Leu Tyr Thr Thr Ser Leu Ala Thr Leu Thr Ser Phe Pro
        35                  40                  45
Asp Ser Met Leu Gly Ala Met Phe Ser Gly Lys Met Pro Thr Lys Arg
    50                  55                  60
Asp Ser Gln Gly Asn Cys Phe Ile Asp Arg Asp Gly Lys Val Phe Arg
65                  70                  75                  80
Tyr Ile Leu Asn Phe Leu Arg Thr Ser His Leu Asp Leu Pro Glu Asp
                85                  90                  95
Phe Gln Glu Met Gly Leu Leu Arg Arg Glu Ala Asp Phe Tyr Gln Val
            100                 105                 110
Gln Pro Leu Ile Glu Ala Leu Gln Glu Lys Glu Val Glu Leu Ser Lys
        115                 120                 125
Ala Glu Lys Asn Ala Met Leu Asn Ile Thr Leu Asn Gln Arg Val Gln
    130                 135                 140
Thr Val His Phe Thr Val Arg Glu Ala Pro Gln Ile Tyr Ser Leu Ser
145                 150                 155                 160
Ser Ser Ser Met Glu Val Phe Asn Ala Asn Ile Phe Ser Thr Ser Cys
                165                 170                 175
Leu Phe Leu Lys Leu Leu Gly Ser Lys Leu Phe Tyr Cys Ser Asn Gly
            180                 185                 190
Asn Leu Ser Ser Ile Thr Ser His Leu Gln Asp Pro Asn His Leu Thr
        195                 200                 205
Leu Asp Trp Val Ala Asn Val Glu Gly Leu Pro Glu Glu Glu Tyr Thr
    210                 215                 220
Lys Gln Asn Leu Lys Arg Leu Trp Val Val Pro Ala Asn Lys Gln Ile
225                 230                 235                 240
Asn Ser Phe Gln Val Phe Val Glu Glu Val Leu Lys Ile Ala Leu Ser
                245                 250                 255
Asp Gly Phe Cys Ile Asp Ser Ser His Pro His Ala Leu Asp Phe Met
            260                 265                 270
```

<210> 1393
<211> 308
<212>Amino acid
<213> Homo sapiens

<400> 1393

```
Ser Cys Ala Asp Asn Leu Val Ala Ala Ser Gly Gly Cys Trp Phe Val
  1               5                  10                  15
Leu Gly Glu Arg Arg Ala Gly Ser Leu Leu Ser Ala Ser Tyr Gly Thr
            20                  25                  30
Phe Ala Met Pro Gly Met Val Leu Phe Gly Arg Arg Trp Ala Ile Ala
        35                  40                  45
Ser Asp Asp Leu Val Phe Pro Gly Phe Phe Glu Leu Val Val Arg Val
    50                  55                  60
Leu Trp Trp Ile Gly Ile Leu Thr Leu Tyr Leu Met His Arg Gly Lys
65                  70                  75                  80
Leu Asp Cys Ala Gly Gly Ala Leu Leu Ser Ser Tyr Leu Ile Val Leu
                85                  90                  95
Met Ile Leu Leu Ala Val Val Ile Cys Thr Val Ser Ala Ile Met Cys
            100                 105                 110
Val Ser Met Arg Gly Thr Ile Cys Asn Pro Gly Pro Arg Lys Ser Met
        115                 120                 125
Ser Lys Leu Leu Tyr Ile Arg Leu Ala Leu Phe Phe Pro Glu Met Val
    130                 135                 140
Trp Ala Ser Leu Gly Ala Ala Trp Val Ala Asp Gly Val Gln Cys Asp
145                 150                 155                 160
Arg Thr Val Val Asn Gly Ile Ile Ala Thr Val Val Val Ser Trp Ile
                165                 170                 175
Ile Ile Ala Ala Thr Val Val Ser Ile Ile Ile Val Phe Asp Pro Leu
            180                 185                 190
Gly Gly Lys Met Ala Pro Tyr Ser Ser Ala Gly Pro Ser His Leu Asp
        195                 200                 205
Ser His Asp Ser Ser Gln Leu Leu Asn Gly Leu Lys Thr Ala Ala Thr
    210                 215                 220
Ser Val Trp Glu Thr Arg Ile Lys Leu Leu Cys Cys Cys Ile Gly Lys
225                 230                 235                 240
Asp Asp His Thr Arg Val Ala Phe Ser Ser Thr Ala Glu Leu Phe Ser
                245                 250                 255
Thr Tyr Phe Ser Asp Thr Asp Leu Val Pro Ser Asp Ile Ala Ala Gly
            260                 265                 270
Leu Ala Leu Leu His Gln Gln Gln Asp Asn Ile Arg Asn Asn Gln Asp
        275                 280                 285
Leu Pro Arg Trp Ser Ala Met Pro Gln Gly Ala Pro Arg Lys Leu Ile
    290                 295                 300
Trp Met Gln Asn
305             308
```

<210> 1394
<211> 238
<212>Amino acid
<213> Homo sapiens

<400> 1394
Phe Arg Ala Ala Thr Ala Ala Ala Lys Gly Asn Gly Gly Gly Gly Gly
1 5 10 15
Arg Ala Gly Ala Gly Asp Ala Ser Gly Thr Arg Lys Lys Lys Gly Pro
20 25 30
Gly Pro Leu Ala Thr Ala Tyr Leu Val Ile Tyr Asn Val Val Met Thr
35 40 45
Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr Leu Ala
50 55 60
Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro Leu Lys
65 70 75 80
Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala Ile Gly
85 90 95
Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met Ser Arg
100 105 110
Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val Gln Ser
115 120 125
Glu Asp Ser Val Leu Phe Val Ile Ala Trp Thr Ile Thr Glu Ile Ile
130 135 140
Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu Pro Tyr Leu
145 150 155 160
Ile Lys Arg Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr Pro Met Gly
165 170 175
Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro Phe Val Arg
180 185 190
Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Ser Thr Lys Lys Ile
195 200 205
Phe Leu Ile Ser Gln Val Trp Trp His Met Leu Ala Val Ser Ala Asp
210 215 220
Ala Lys Ala Ala Glu Met Pro Ala Val Leu Lys Pro Gly Pro
225 230 235 238

<210> 1395
<211> 231
<212>Amino acid
<213> Homo sapiens

<400> 1395
Met Leu Thr Gly Val Gly Cys Leu Val Ser Ser Glu Ser Leu Ser Cys
1 5 10 15
Val Gln Cys Asn Ser Trp Glu Lys Ser Cys Val Asn Ser Ile Ala Ser
20 25 30
Glu Cys Pro Ser His Ala Asn Thr Ser Cys Ile Ser Ser Ser Ala Ser
35 40 45
Ser Ser Leu Glu Thr Pro Val Arg Leu Tyr Gln Asn Met Phe Cys Ser
50 55 60
Ala Glu Asn Cys Ser Glu Glu Thr His Ile Thr Ala Phe Thr Val His
65 70 75 80
Val Ser Ala Glu Glu His Phe His Phe Val Ser Gln Cys Cys Glu Gly
85 90 95
Lys Glu Cys Ser Asn Thr Ser Asp Ala Leu Asp Pro Pro Leu Lys Asn
100 105 110
Val Ser Ser Asn Ala Glu Cys Pro Ala Cys Tyr Glu Ser Asn Gly Thr
115 120 125
Ser Cys Arg Gly Lys Pro Trp Lys Cys Tyr Glu Glu Glu Gln Cys Val
130 135 140
Phe Leu Val Ala Glu Leu Lys Asn Asp Ile Glu Ser Lys Ser Leu Val
145 150 155 160

```
Leu Lys Gly Cys Ser Asn Val Ser Asn Ala Thr Cys Gln Phe Leu Ser
                165                 170                 175
Gly Glu Asn Lys Thr Leu Gly Gly Val Ile Phe Arg Lys Phe Glu Cys
            180                 185                 190
Ala Asn Val Asn Ser Leu Thr Pro Thr Ser Ala Pro Thr Thr Ser His
        195                 200                 205
Asn Val Gly Ser Lys Ala Ser Leu Tyr Leu Leu Ala Leu Ala Ser Leu
    210                 215                 220
Leu Leu Arg Gly Leu Leu Pro
225                 230 231
```

<210> 1396
<211> 216
<212>Amino acid
<213> Homo sapiens

<400> 1396

```
Val Pro Ala Arg Arg Arg Ala Met Glu Ile Gly Thr Glu Ile Ser Arg
  1               5                  10                  15
Lys Ile Arg Ser Ala Ile Lys Gly Lys Leu Gln Glu Leu Gly Ala Tyr
            20                  25                  30
Val Asp Glu Glu Leu Pro Asp Tyr Ile Met Val Met Val Ala Asn Lys
        35                  40                  45
Lys Ser Gln Asp Gln Met Thr Glu Asp Leu Ser Leu Phe Leu Gly Asn
    50                  55                  60
Asn Thr Ile Arg Phe Thr Val Trp Leu His Gly Val Leu Asp Lys Leu
65                  70                  75                  80
Arg Ser Val Thr Thr Glu Pro Ser Ser Leu Lys Ser Ser Asp Thr Asn
                85                  90                  95
Ile Phe Asp Ser Asn Val Pro Ser Asn Lys Ser Asn Phe Ser Arg Gly
            100                 105                 110
Asp Glu Arg Arg His Glu Ala Ala Val Pro Pro Leu Ala Ile Pro Ser
        115                 120                 125
Ala Arg Pro Glu Lys Arg Asp Ser Arg Val Ser Thr Ser Ser Gln Glu
    130                 135                 140
Ser Lys Thr Thr Asn Val Arg Gln Thr Tyr Asp Asp Gly Ala Ala Thr
145                 150                 155                 160
Arg Leu Met Ser Thr Val Lys Pro Leu Arg Glu Pro Ala Pro Ser Glu
                165                 170                 175
Asp Val Ile Asp Ile Lys Pro Glu Pro Asp Asp Leu Ile Asp Glu Asp
            180                 185                 190
Leu Asn Phe Val Gln Glu Lys Pro Leu Ser Gln Lys Lys Pro Thr Val
        195                 200                 205
Thr Leu Thr Tyr Gly Ser Ser Arg
    210                 215 216
```

<210> 1397
<211> 135
<212>Amino acid
<213> Homo sapiens

<400> 1397

```
Ala Ser Arg Val Leu Ala Ala Val Met Gly Leu Pro Trp Gly Gln Pro
  1               5                  10                  15
```

```
His Leu Gly Leu Gln Met Leu Leu Leu Ala Leu Asn Trp Leu Arg Pro
            20                  25                  30
Ser Leu Ser Leu Glu Leu Val Pro Tyr Thr Pro Gln Ile Thr Ala Trp
        35                  40                  45
Asp Leu Glu Gly Lys Val Thr Ala Thr Thr Phe Ser Leu Glu Gln Pro
    50                  55                  60
Arg Cys Val Phe Asp Gly Leu Ala Ser Ala Ser Asp Thr Val Trp Leu
65                  70                  75                  80
Val Val Ala Phe Ser Asn Ala Ser Arg Gly Phe Gln Asn Pro Glu Thr
                85                  90                  95
Leu Ala Asp Ile Pro Ala Ser Pro Gln Leu Leu Thr Asp Gly His Tyr
            100                 105                 110
Met Thr Leu Pro Leu Ser Pro Asp Gln Leu Pro Cys Gly Asp Pro Met
        115                 120                 125
Ala Gly Ser Gly Ser Ala Pro
    130                 135
```

<210> 1398
<211> 41
<212>Amino acid
<213> Homo sapiens

<400> 1398

```
Asn Ser Leu Asn Asn Phe Phe Phe Glu Thr Glu Ser Cys Cys Val Ala
 1               5                  10                  15
Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Ser Leu Gln Ala Pro Pro
            20                  25                  30
Pro Gly Phe Lys Arg Phe Ser Cys Leu
        35                  40  41
```

<210> 1399
<211> 151
<212>Amino acid
<213> Homo sapiens

<400> 1399

```
Lys Ser Leu Pro Leu Gln Lys His Pro Lys Pro Ser Cys Gln Glu Asp
 1               5                  10                  15
Gln Gly Leu Gly Arg Gly Ser Leu Ser Gly His Ser Pro Leu Thr Leu
            20                  25                  30
Leu Thr Phe Leu Thr Ser Cys Ala Leu Gly Asp Gln Gln Leu Leu Pro
        35                  40                  45
Pro Arg Thr Ser Gly Ser Leu Cys Gln Glu Ser Met Ser Glu Gln Ser
    50                  55                  60
Cys Gln Met Ser Glu Leu Arg Leu Leu Leu Leu Gly Lys Cys Arg Ser
65                  70                  75                  80
Gly Lys Ser Ala Thr Gly Asn Ala Ile Leu Gly Lys His Val Phe Lys
                85                  90                  95
Ser Lys Phe Ser Asp Gln Thr Val Ile Lys Met Cys Gln Arg Glu Ser
            100                 105                 110
Trp Val Leu Arg Glu Arg Lys Val Val Val Ile Asp Thr Pro Asp Leu
        115                 120                 125
Phe Ser Ser Ile Ala Cys Ala Glu Asp Lys Gln Arg Asn Ile Gln His
    130                 135                 140
```

```
Leu Leu Glu Leu Ser Ala Pro
145                 150 151
```

<210> 1400
<211> 324
<212>Amino acid
<213> Homo sapiens

<400> 1400

```
Phe Val Glu Thr Thr Val Ser Val Gln Ser Ala Glu Ser Ser Asp Ala
  1               5                  10                  15
Leu Ser Trp Ser Arg Leu Pro Arg Ala Leu Ala Ser Val Gly Pro Glu
             20                  25                  30
Glu Ala Arg Ser Gly Ala Pro Val Gly Gly Gly Arg Trp Gln Leu Ser
         35                  40                  45
Asp Arg Val Glu Gly Gly Ser Pro Thr Leu Gly Leu Leu Gly Gly Ser
     50                  55                  60
Pro Ser Ala Gln Pro Gly Thr Gly Asn Val Glu Ala Gly Ile Pro Ser
 65                  70                  75                  80
Gly Arg Met Leu Glu Pro Leu Pro Cys Trp Asp Ala Ala Lys Asp Leu
                 85                  90                  95
Lys Glu Pro Gln Cys Pro Pro Gly Asp Arg Val Gly Val Gln Pro Gly
            100                 105                 110
Asn Ser Arg Val Trp Gln Gly Thr Met Glu Lys Ala Gly Leu Ala Trp
        115                 120                 125
Thr Arg Gly Thr Gly Val Gln Ser Glu Gly Thr Trp Glu Ser Gln Arg
    130                 135                 140
Gln Asp Ser Asp Ala Leu Pro Ser Pro Glu Leu Leu Pro Gln Asp Gln
145                 150                 155                 160
Asp Lys Pro Phe Leu Arg Lys Ala Cys Ser Pro Ser Asn Ile Pro Ala
                165                 170                 175
Val Ile Ile Thr Asp Met Gly Thr Gln Glu Asp Gly Ala Leu Glu Glu
            180                 185                 190
Thr Gln Gly Ser Pro Arg Gly Asn Leu Pro Leu Arg Lys Leu Ser Ser
        195                 200                 205
Ser Ser Ala Ser Ser Thr Gly Phe Ser Ser Ser Tyr Glu Asp Ser Glu
    210                 215                 220
Glu Asp Ile Ser Ser Asp Pro Glu Arg Thr Leu Asp Pro Asn Ser Ala
225                 230                 235                 240
Phe Leu His Thr Leu Asp Gln Gln Lys Pro Arg Val Val Glu Ser Arg
                245                 250                 255
Ser Val Thr Gln Ala Gly Val Gln Trp His Asp Ile Gly Ser Leu Gln
            260                 265                 270
Pro Leu Pro Pro Trp Ile Gln Ala Ile Leu His Ala Ser Ala Phe Arg
        275                 280                 285
Ile Ala Gly Thr Thr Gly Ala Cys His His Ala Arg Ile Ile Phe Gly
    290                 295                 300
Phe Leu Val Glu Arg Gly Phe His His Val Gly Gln Asp Gly Leu Tyr
305                 310                 315                 320
Leu Leu Ile Leu
            324
```

<210> 1401
<211> 76
<212>Amino acid
<213> Homo sapiens

<220>

<221> misc_feature
<222> (1)...(76)
<223> X = any amino acid or stop code

<400> 1401

```
Lys Ile Cys Ser Ser Tyr Phe Leu Arg Ile Ile Cys Ile Leu Gln Lys
 1               5                  10                  15
Glu Ala Gln Glu Ala Ser Asn Leu Tyr Thr Ser Cys Asp Phe Phe Ser
            20                  25                  30
Pro Ala Phe Tyr Phe Val Ile Tyr Arg Leu Tyr Asn Phe Lys Ile His
        35                  40                  45
Trp Pro Gly Ala Val Ala His Thr Tyr Ser Pro Ser Thr Leu Gly Gly
    50                  55                  60
Arg Gly Arg Trp Val Thr Xaa Gly Arg Glu Phe Met
65                  70                  75  76
```

<210> 1402
<211> 102
<212>Amino acid
<213> Homo sapiens

<400> 1402

```
Leu Ile Leu Ser Leu Pro Leu Leu Tyr Gly His Leu Lys Ser Tyr Thr
 1               5                  10                  15
Phe Pro Ser Glu His Tyr Leu His Leu Leu Gln Thr Phe Ala Thr Phe
            20                  25                  30
Asn Lys Tyr Leu Asn Val Cys Val Leu Ile Phe Ile His His Lys Pro
        35                  40                  45
Val Val Pro Ala Ile Gln Gly Thr Asn Val Gly Gly Ser Leu Glu Pro
    50                  55                  60
Arg Arg Leu Arg Leu Gln Gln Ala Met Ile Val Pro Leu His Phe Gly
65                  70                  75                  80
Leu Gly Asn Arg Val Arg Pro Cys Leu Lys Lys Gln Gln Gln Gln Gln
                85                  90                  95
Gln Gln Gln Gln Lys Lys
            100     102
```

<210> 1403
<211> 124
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(124)
<223> X = any amino acid or stop code

<400> 1403

```
Arg Met Glu Thr Lys Pro Val Ile Thr Cys Leu Lys Thr Leu Leu Ile
 1               5                  10                  15
```

```
Ile Tyr Ser Phe Val Phe Trp Ile Thr Gly Val Ile Leu Leu Ala Ala
            20                  25                  30
Gly Val Trp Gly Lys Leu Thr Leu Gly Ser Tyr Ile Ser Leu Ile Ala
        35                  40                  45
Glu Asn Ser Thr Tyr Ala Pro Tyr Val Leu Ile Val Thr Gly Thr Thr
    50                  55                  60
Ile Val Ala Tyr Pro Leu Val Xaa Phe Phe Phe Ser Tyr Ser Ser Gly
65                  70                  75                  80
Phe Ser Tyr Ile Leu Ala Val Arg Leu Ile Ala Gly Ile Ala Leu Val
                85                  90                  95
Tyr Asn Tyr Ile Pro Arg Ser Ser Ser Arg Ala Leu Val Arg Leu Val
            100                 105                 110
Val Leu Leu Arg Phe Leu Leu Ser Arg His Pro Ser
        115                 120             124
```

<210> 1404
<211> 136
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(136)
<223> X = any amino acid or stop code

<400> 1404

```
Asn Ala Glu His Pro Gly Met Asp Arg His Asp Leu Cys Gln Lys Ala
  1               5                  10                  15
Lys Leu Ala Glu His Ala Glu Arg Asp Asp Asp Met Ala Ala Cys Met
            20                  25                  30
Lys Thr Val Thr Asp Gln Gly Ala Glu Leu Ser Asn Glu Glu Arg Asn
        35                  40                  45
Leu Leu Ser Asp Ala His Thr Asn Ala Val Xaa Ala Arg Arg Ser Ser
    50                  55                  60
Trp Met Gly Ala Xaa Arg Ile Glu Gln Lys Thr Glu Gly Ala Asp Thr
65                  70                  75                  80
Gln Gln Gln Met Ala Pro Asp Cys Arg Glu Ile Phe Ala Thr Glu Leu
                85                  90                  95
Arg Asp Ile Cys Asp Asp Val Leu Ser Leu Leu Glu Lys Leu Leu Ile
            100                 105                 110
Pro Asn Ala Ser His Ala Xaa Ser Leu Val Tyr Tyr Leu His Met Ile
        115                 120                 125
Gly Asp Tyr Tyr Arg Tyr Trp Leu
    130                 135 136
```

<210> 1405
<211> 110
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(110)
<223> X = any amino acid or stop code

MISSING AT THE TIME OF PUBLICATION

```
Gly Asn Asp Tyr Ser Leu Gly Leu Thr Pro Thr Gly Val Leu Val Phe
                 85                  90                  95
Glu Gly Asp Thr Lys Ile Gly Leu Phe Phe Trp Pro Lys Ile Thr Arg
            100                 105                 110
Leu Asp Phe Lys Lys Asn Lys Leu Thr Leu Val Val Val Glu Asp Asp
        115                 120                 125
Asp Gln Gly Lys Glu Gln Glu His Thr Phe Val Phe Arg Leu Asp His
    130                 135                 140
Pro Lys Ala Cys Lys His Leu Trp Lys Cys Ala Val Glu His His Ala
145                 150                 155                 160
Phe Phe Arg Leu Arg Gly Pro Val Gln Lys Ser Ser His Arg Ser Gly
                165                 170                 175
Phe Ile Arg Leu Gly Ser Arg Phe Arg Tyr Ser Gly Lys Thr Glu Tyr
            180                 185                 190
Gln Thr Thr Lys Thr Asn Lys Ala Arg Arg Ser Thr Ser Phe Glu Arg
        195                 200                 205
Arg Pro Ser Lys Arg Tyr Ser Arg Arg Thr Leu Gln Met Lys Ala Cys
    210                 215                 220
Ala Thr Lys Pro Glu Glu Leu Ser Val His Asn Asn Val Ser Thr Gln
225                 230                 235                 240
Ser Asn Gly Ser Gln Gln Ala Trp Gly Met Arg Ser Ala Leu Pro Val
                245                 250                 255
Ser Pro Ser Ile Ser Ser Ala Pro Val Pro Val Glu Ile Glu Asn Leu
            260                 265                 270
Pro Gln Ser Pro Gly Thr Asp Gln His Asp Arg Lys Trp Leu Ser Ala
        275                 280                 285
Ala Ser Asp Cys Cys Gln Arg Gly Gly Asn Gln Trp Asn Thr Arg Ala
    290                 295                 300
Leu
305
```

<210> 1408
<211> 92
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(92)
<223> X = any amino acid or stop code

<400> 1408

```
Ala Thr Ala Pro Gly Leu Phe Asn Phe Phe Xaa Phe Leu Phe Gln Cys
  1               5                  10                  15
Arg Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala
            20                  25                  30
Glu Phe Ser Lys Lys Cys Ser Gly Arg Trp Lys Thr Met Ser Ser Lys
        35                  40                  45
Glu Lys Phe Lys Phe Gly Glu Met Ala Lys Ala Asp Glu Val Cys Tyr
    50                  55                  60
Asp Arg Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys
65                  70                  75                  80
Asp Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe
                85                  90      92
```

<210> 1409
<211> 169
<212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(169)
<223> X = any amino acid or stop code

<400> 1409

```
Ala Glu Gly Leu Gly Ser Trp Ala Val Trp Ala Gly Leu Gly Trp Ala
  1               5                  10                  15
Gly Arg His Met Glu Ala Gly Gly Ala Thr Gly Ala Leu Gly Val Gly
             20                  25                  30
Ser Lys Leu Pro Ser Ala Phe Cys Phe Pro Gly Ser Ser Val Ala Met
         35                  40                  45
Asp Met Phe Gln Lys Val Glu Lys Ile Gly Glu Gly Thr Tyr Gly Val
     50                  55                  60
Val Tyr Lys Ala Lys Asn Arg Glu Thr Gly Gln Leu Val Ala Leu Lys
 65                  70                  75                  80
Lys Ile Arg Leu Asp Leu Xaa Val Leu Gly Arg Pro Leu Ser Tyr Pro
                 85                  90                  95
Pro Trp Ala Ile Thr Thr Trp Ala Leu Pro Asp Pro Phe Pro Leu Ser
            100                 105                 110
Trp Ser Pro Arg Leu Thr Pro Leu Gly Ala Ala Gln Gln Pro Leu Pro
        115                 120                 125
Val Leu Ser Pro Val His Cys Leu Leu Thr Ser Leu Cys Arg Gly Pro
    130                 135                 140
Asp Cys Gly Val Trp Trp Met Thr Cys Gln Gly Ala Gln Val Ser Ile
145                 150                 155                 160
Ala Gly Ala Leu Val Ile Leu Trp Gly
                165                 169
```

<210> 1410
<211> 146
<212>Amino acid
<213> Homo sapiens

<400> 1410

```
Leu Cys Val Ser Val Leu Cys Ser Phe Ser Tyr Leu Gln Asn Gly Trp
  1               5                  10                  15
Thr Ala Ser Asp Pro Val His Gly Tyr Trp Phe Arg Ala Gly Asp His
             20                  25                  30
Val Ser Arg Asn Ile Pro Val Ala Thr Asn Asn Pro Val Arg Ala Val
         35                  40                  45
Gln Glu Glu Thr Arg Asp Arg Phe His Leu Leu Gly Asp Pro Gln Asn
     50                  55                  60
Lys Asp Cys Thr Leu Ser Ile Arg Asp Thr Arg Glu Ser Asp Ala Gly
 65                  70                  75                  80
Thr Tyr Val Phe Cys Val Glu Arg Gly Asn Met Lys Trp Asn Tyr Lys
                 85                  90                  95
Tyr Asp Gln Leu Ser Val Asn Val Thr Ala Ser Gln Asp Leu Leu Ser
            100                 105                 110
Arg Tyr Arg Leu Glu Val Pro Glu Ser Val Thr Val Gln Glu Gly Leu
        115                 120                 125
Cys Val Ser Val Pro Trp Gln Cys Pro Leu Pro Pro Leu Gln Leu Asp
    130                 135                 140
```

Cys Leu
145 146

<210> 1411
<211> 250
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(250)
<223> X = any amino acid or stop code

<400> 1411

```
Gln Leu Gln Leu Cys Gln Asn Cys Thr Lys Arg Gly Glu Cys His Cys
  1               5                  10                  15
Val Pro Phe Asp Thr Tyr Ile Lys Thr Lys Lys Glu Lys Lys Arg Leu
            20                  25                  30
Ser Val Leu Pro Pro Thr Arg Leu Met Glu Ala Arg Phe Ser Pro Ile
        35                  40                  45
Asn Gln Ile Leu Pro Trp Cys Arg Gln Asp Leu Ala Ile Ser Ile Ser
    50                  55                  60
Lys Ala Ile Asn Thr Gln Glu Ala Pro Val Lys Glu Lys His Ala Arg
65                  70                  75                  80
Arg Ile Ile Leu Gly Thr His His Glu Lys Gly Ala Phe Thr Phe Trp
                85                  90                  95
Ser Tyr Ala Ile Gly Leu Pro Leu Pro Ser Ser Ser Ile Leu Ser Trp
            100                 105                 110
Lys Phe Cys His Val Leu His Lys Val Leu Arg Asp Gly His Pro Asn
        115                 120                 125
Val Leu His Asp Cys Gln Arg Tyr Arg Ser Asn Ile Arg Glu Ile Gly
    130                 135                 140
Asp Leu Trp Gly His Leu His Asp Arg Tyr Gly Gln Leu Val Asn Val
145                 150                 155                 160
Tyr Thr Lys Leu Leu Leu Thr Lys Ile Ser Phe His Leu Lys His Pro
                165                 170                 175
Gln Phe Pro Ala Gly Leu Glu Val Thr Asp Glu Val Leu Glu Lys Ala
            180                 185                 190
Ala Gly Thr Asp Val Asn Asn Met Xaa Val Thr Leu His Gly Tyr Met
        195                 200                 205
Ala Ser Ser Pro Arg Leu Pro His Ser Phe Leu Pro Arg Leu Thr Pro
    210                 215                 220
Arg Arg Pro His Gly Ala Val Gly Leu Asn Glu Ser Val Ala Leu Leu
225                 230                 235                 240
Val Asp Ala His Ala Pro Arg Asp Arg Gly
                245                 250
```

<210> 1412
<211> 169
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(169)
<223> X = any amino acid or stop code

<400> 1412

```
Ala Ala Pro His Arg Met Pro Arg Ala Pro His Phe Met Pro Leu Leu
  1               5                  10                  15
Leu Leu Leu Leu Leu Leu Ser Leu Pro His Thr Gln Ala Ala Phe Pro
             20                  25                  30
Gln Asp Pro Leu Pro Leu Leu Ile Ser Asp Leu Gln Gly Thr Ser Pro
         35                  40                  45
Leu Ser Trp Leu Pro Ser Leu Glu Asp Asp Ala Val Ala Ala Xaa Leu
     50                  55                  60
Gly Leu Asp Phe Gln Arg Phe Leu Thr Leu Asn Arg Thr Leu Leu Val
 65                  70                  75                  80
Ala Ala Arg Asp His Val Phe Ser Phe Asp Leu Gln Ala Glu Glu Glu
                 85                  90                  95
Gly Glu Gly Leu Val Pro Asn Lys Tyr Leu Thr Trp Arg Ser Gln Asp
            100                 105                 110
Val Glu Asn Cys Ala Val Arg Xaa Lys Leu Thr Leu Asn Arg Thr Leu
        115                 120                 125
Leu Val Ala Ala Arg Asp His Val Phe Ser Phe Asp Leu Gln Ala Glu
    130                 135                 140
Glu Glu Gly Glu Gly Leu Val Pro Asn Lys Tyr Leu Thr Trp Arg Ser
145                 150                 155                 160
Gln Asp Val Glu Asn Cys Ala Val Arg
                165             169
```

<210> 1413
<211> 131
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(131)
<223> X = any amino acid or stop code

<400> 1413

```
His Leu Val Pro Lys Thr Arg Gly Arg Gly Thr Pro Ser Gly Asp Gln
  1               5                  10                  15
Ser Pro Val Leu Thr Leu Thr Pro Xaa Gly Asp Pro Pro Thr Ile Leu
             20                  25                  30
Gly Pro Gln Thr Asn Gln Pro Lys Glu His Leu Thr Asn Phe Lys Ser
         35                  40                  45
Gly Lys Arg Ser Phe His Ser Leu Leu Gln Pro Leu Leu Leu Leu Leu
     50                  55                  60
His Pro Ser Ile Ser Pro Phe Leu Asn Phe Gly Ser Phe Pro Phe Leu
 65                  70                  75                  80
Val Glu Thr Glu Glu Thr Cys Phe Ile His Lys Leu Lys Thr Pro Ala
                 85                  90                  95
Leu Val Thr Pro Asp Ser Leu Pro Leu Val Phe Asn His Cys Gly Asp
            100                 105                 110
Ala Cys Leu Ile Ile His Pro His Phe Arg Asp Val Glu Phe His His
        115                 120                 125
Thr Gly Asn
    130 131
```

<210> 1414

<211> 365
<212>Amino acid
<213> Homo sapiens

<400> 1414

```
Cys Cys Ser Thr Lys Asn Ile Ser Gly Asp Lys Ala Cys Asn Leu Met
 1               5                  10                  15
Ile Phe Asp Thr Arg Lys Thr Ala Arg Gln Pro Asn Cys Tyr Leu Phe
            20                  25                  30
Phe Cys Pro Asn Glu Glu Ala Cys Pro Leu Lys Pro Ala Lys Gly Leu
        35                  40                  45
Met Ser Tyr Arg Ile Ile Thr Asp Phe Pro Ser Leu Thr Arg Asn Leu
    50                  55                  60
Pro Ser Gln Glu Leu Pro Gln Glu Asp Ser Leu Leu His Gly Gln Phe
65                  70                  75                  80
Ser Gln Ala Val Thr Pro Leu Ala His His His Thr Asp Tyr Ser Lys
                85                  90                  95
Pro Thr Asp Ile Ser Trp Arg Asp Thr Leu Ser Gln Lys Phe Gly Ser
            100                 105                 110
Ser Asp His Leu Glu Lys Leu Phe Lys Met Asp Glu Ala Ser Ala Gln
        115                 120                 125
Leu Leu Ala Tyr Lys Glu Lys Gly His Ser Gln Ser Ser Gln Phe Ser
    130                 135                 140
Ser Asp Gln Glu Ile Ala His Leu Leu Pro Glu Asn Val Ser Ala Leu
145                 150                 155                 160
Pro Ala Thr Val Ala Val Ala Ser Pro His Thr Thr Ser Ala Thr Pro
                165                 170                 175
Lys Pro Ala Thr Leu Leu Pro Thr Asn Ala Ser Val Thr Pro Ser Gly
            180                 185                 190
Thr Ser Gln Pro Gln Leu Ala Thr Thr Ala Pro Pro Val Thr Thr Val
        195                 200                 205
Thr Ser Gln Pro Pro Thr Thr Leu Ile Ser Thr Val Phe Thr Arg Ala
    210                 215                 220
Ala Ala Thr Leu Gln Ala Met Ala Thr Thr Ala Val Leu Thr Thr Thr
225                 230                 235                 240
Phe Gln Ala Pro Thr Asp Ser Lys Gly Ser Leu Glu Thr Ile Pro Phe
                245                 250                 255
Thr Glu Ile Ser Asn Leu Thr Leu Asn Thr Gly Asn Val Tyr Asn Pro
            260                 265                 270
Thr Ala Leu Ser Met Ser Asn Val Glu Ser Ser Thr Met Asn Lys Thr
        275                 280                 285
Ala Ser Trp Glu Gly Arg Glu Ala Ser Pro Gly Ser Ser Ser Gln Gly
    290                 295                 300
Ser Val Pro Glu Asn Gln Tyr Gly Leu Pro Phe Glu Lys Trp Leu Leu
305                 310                 315                 320
Ile Gly Ser Leu Leu Phe Gly Val Leu Phe Leu Val Ile Gly Leu Val
                325                 330                 335
Leu Leu Gly Arg Ile Leu Ser Glu Ser Leu Arg Arg Lys Arg Tyr Ser
            340                 345                 350
Arg Leu Asp Tyr Leu Ile Asn Gly Ile Tyr Val Asp Ile
        355                 360                 365
```

<210> 1415
<211> 148
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature

<222> (1)...(148)
<223> X = any amino acid or stop code

<400> 1415

```
Ile Phe Ala Gly Ser Gly Val Met Arg Leu Lys Ile Ser Leu Leu Lys
  1               5                  10                  15
Glu Pro Lys His Gln Glu Leu Val Ser Cys Val Gly Trp Thr Thr Ala
            20                  25                  30
Glu Glu Leu Tyr Ser Cys Ser Asp Asp His His Ile Val Lys Trp Asn
        35                  40                  45
Leu Leu Thr Ser Glu Thr Thr Gln Ile Val Lys Leu Pro Asp Asp Ile
    50                  55                  60
Tyr Pro Ile Asp Phe His Trp Phe Pro Lys Ser Leu Gly Val Lys Lys
65                  70                  75                  80
Gln Thr His Ala Glu Ser Phe Val Leu Thr Ser Ser Asp Gly Lys Phe
                85                  90                  95
His Leu Ile Ser Lys Leu Gly Arg Val Glu Lys Ser Val Glu Ala His
            100                 105                 110
Cys Gly Ala Val Leu Ala Gly Arg Trp Asn Tyr Glu Gly Thr Ala Leu
        115                 120                 125
Val Thr Val Gly Glu Asp Gly Gln Ile Xaa Ile Trp Ser Lys Thr Gly
    130                 135                 140
Met Leu Ile Ser
145         148
```

<210> 1416
<211> 122
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(122)
<223> X = any amino acid or stop code

<400> 1416

```
Ala Arg Ala Thr Thr Lys Arg His Phe Ile Leu Leu Phe Leu Phe Phe
  1               5                  10                  15
Leu Arg Arg Cys Leu Phe Leu Ser Pro Arg Met Glu Cys Asn Gly Ala
            20                  25                  30
Ile Leu Ala His Cys Asn Leu His Leu Pro Gly Ser Ser Ser Ser Ser
        35                  40                  45
Ala Ser Ala Ser Xaa Val Ala Gly Ile Thr Asp Val Arg His His Ala
    50                  55                  60
Gln Leu Ile Leu Phe Val Phe Leu Val Glu Thr Gly Phe His Arg Val
65                  70                  75                  80
Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp Leu Leu Thr Ser
                85                  90                  95
Ala Ser Gln Ser Ala Gly Ile Ile Met Gly Ile Ser His Cys Ala Gln
            100                 105                 110
Pro Lys Lys Ala Phe Xaa Thr Lys Thr Phe
        115                 120     122
```

<210> 1417

<211> 138
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(138)
<223> X = any amino acid or stop code

<400> 1417

```
Glu Ala Gly Ser Asn Asp Asp Leu Ala Thr Xaa Lys Thr Cys Gly Arg
 1               5                  10                  15
Ala Arg Pro Ser Ser Arg Ser Arg Gln Phe Gly Ser Arg Val Trp Asn
            20                  25                  30
His Arg Gln Gly Val Arg Ser Ser Pro Gly Glu Gly Ala Gly Ser Arg
        35                  40                  45
Ser Pro Cys Arg Arg Arg His Arg Arg Lys His Arg Arg Asn Val Gln
    50                  55                  60
Ser Pro Xaa Arg Arg Arg Ser Arg Ser Cys Ser Arg Arg Ser Gly Arg
65                  70                  75                  80
Cys Ser Val Ala Leu Leu Gly Ala Cys Pro Val Ala Gly His Ser Arg
                85                  90                  95
Gly Lys Val Val Cys Arg Arg Ala His Ala Ile Thr Gln Arg Arg Arg
            100                 105                 110
Cys Cys Gly Phe Asp Pro Met Val His Pro Lys Glu His Arg Gly Xaa
        115                 120                 125
Arg Glu Arg Ser Arg Lys Trp Ser Arg Ser
    130                 135         138
```

<210> 1418
<211> 92
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(92)
<223> X = any amino acid or stop code

<400> 1418

```
Ala Thr Ala Pro Gly Leu Phe Asn Phe Phe Xaa Phe Leu Phe Gln Cys
 1               5                  10                  15
Arg Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala
            20                  25                  30
Glu Phe Ser Lys Lys Cys Ser Gly Arg Trp Lys Thr Met Ser Ser Lys
        35                  40                  45
Glu Lys Phe Lys Phe Gly Glu Met Ala Lys Ala Asp Glu Val Cys Tyr
    50                  55                  60
Asp Arg Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys
65                  70                  75                  80
Asp Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe
                85                  90      92
```

<210> 1419

<211> 44
<212>Amino acid
<213> Homo sapiens

<400> 1419

```
Leu Thr Val Asn Tyr Val Leu Val Phe Ser Arg Asp Ser Gly Leu Arg
 1               5                  10                  15
Ala Ile Glu Asn Leu Met Gln Lys Lys Gly Lys Phe Asp Tyr Ile Leu
            20                  25                  30
Leu Glu Thr Thr Gly Leu Ala Asp Pro Gly Lys Lys
        35                  40              44
```

<210> 1420
<211> 91
<212>Amino acid
<213> Homo sapiens

<400> 1420

```
His Glu Ala Ala Leu Cys Arg Thr Arg Ala Val Ala Ala Glu Arg His
 1               5                  10                  15
Phe Leu Arg Val Phe Leu Phe Phe Arg Pro Phe Arg Gly Val Gly Thr
            20                  25                  30
Glu Ser Gly Ser Glu Ser Gly Ser Ser Lys Ala Lys Glu Pro Arg Thr
        35                  40                  45
Pro Ser Ser Ser Tyr Gly Thr Ala Gln Tyr Arg Arg Trp Pro Ile Ala
    50                  55                  60
Gln Glu Tyr Lys His Cys Thr Ala His Asn Asp Thr Gly Thr Leu Cys
65                  70                  75                  80
Ser Glu Leu Arg Glu Pro Trp Arg Arg Pro Gln
                85                  90  91
```

<210> 1421
<211> 190
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(190)
<223> X = any amino acid or stop code

<400> 1421

```
Glu Gly Ser Ser Gln Ala Asn Thr Leu Arg Ser Arg Lys Glu Asn Arg
 1               5                  10                  15
Asn Asn Leu Leu Ala Cys Leu Glu Ser His Val Leu Arg Xaa Gln Phe
            20                  25                  30
Thr Glu Ser His Leu Cys Ser Leu Met Gly Asp Asn Pro Phe Gln Pro
        35                  40                  45
Lys Ser Asn Ser Lys Met Ala Glu Leu Phe Met Glu Cys Glu Glu Glu
    50                  55                  60
```

```
Glu Leu Glu Pro Trp Gln Lys Lys Val Lys Glu Val Glu Asp Asp Asp
 65                  70                  75                  80
Asp Asp Glu Pro Ile Phe Val Gly Glu Ile Ser Ser Ser Lys Pro Ala
                 85                  90                  95
Ile Ser Asn Ile Leu Asn Arg Val Asn Pro Ser Ser Tyr Ser Arg Gly
            100                 105                 110
Leu Lys Asn Gly Ala Leu Ser Arg Gly Ile Thr Ala Ala Phe Lys Pro
        115                 120                 125
Thr Ser Gln His Tyr Thr Asn Pro Thr Ser Asn Pro Val Pro Ala Ser
    130                 135                 140
Pro Ile Asn Phe His Pro Glu Ser Arg Ser Ser Asp Ser Ser Val Ile
145                 150                 155                 160
Gly Gln Pro Phe Ser Lys Pro Val Ser Val Ser Lys Thr Ile Arg Pro
                165                 170                 175
Ala Gln Gly Ser Ile Gly Cys Cys Leu Ser Ile Ser Thr Val
            180                 185                 190
```

<210> 1422
<211> 207
<212>Amino acid
<213> Homo sapiens

<400> 1422

```
Cys Phe Ser Leu Glu Asp Ile Leu Asn Phe Phe Leu Gln Gly Phe Ser
  1                 5                  10                  15
Ala Gly Leu Phe Ala Phe Tyr His Asp Lys Asp Gly Asn Pro Leu Thr
             20                  25                  30
Ser Arg Phe Ala Asp Gly Leu Pro Pro Phe Asn Tyr Ser Leu Gly Leu
         35                  40                  45
Tyr Gln Trp Ser Asp Lys Val Val Arg Lys Val Glu Arg Leu Trp Asp
     50                  55                  60
Val Arg Asp Asn Lys Ile Val Arg His Thr Val Tyr Leu Leu Val Thr
 65                  70                  75                  80
Pro Arg Val Val Glu Glu Ala Arg Lys His Phe Asp Cys Pro Val Leu
                 85                  90                  95
Glu Gly Met Glu Leu Glu Asn Gln Gly Gly Val Gly Thr Glu Leu Asn
            100                 105                 110
His Trp Glu Lys Arg Leu Leu Glu Asn Glu Ala Met Thr Gly Ser His
        115                 120                 125
Thr Gln Asn Arg Val Leu Ser Arg Ile Thr Leu Ala Leu Met Glu Asp
    130                 135                 140
Thr Gly Arg Gln Met Leu Ser Pro Tyr Cys Asp Thr Leu Arg Ser Asn
145                 150                 155                 160
Pro Leu Gln Leu Thr Cys Arg Gln Asp Gln Arg Ala Val Ala Val Cys
                165                 170                 175
Asn Leu Gln Lys Phe Pro Lys Pro Leu Pro Gln Glu Tyr Gln Tyr Phe
            180                 185                 190
Asp Glu Leu Ser Gly Ile Pro Ala Glu Asp Leu Pro Tyr Tyr Gly
        195                 200                 205     207
```

<210> 1423
<211> 423
<212>Amino acid
<213> Homo sapiens

<400> 1423
Ala Ala Arg Arg Arg Arg Gln Leu Val Ser Arg Arg Arg Thr Ala Glu
1 5 10 15
Tyr Pro Arg Arg Arg Arg Ser Ser Pro Ser Ala Arg Pro Pro Asp Val
20 25 30
Pro Gly Gln Gln Pro Lys Ala Ala Lys Ser Pro Ser Pro Val Gln Gly
35 40 45
Lys Lys Ser Pro Arg Leu Leu Cys Ile Glu Lys Val Thr Thr Asp Lys
50 55 60
Asp Pro Lys Glu Glu Lys Glu Glu Glu Asp Asp Ser Ala Leu Pro Gln
65 70 75 80
Glu Val Ser Ile Ala Ala Ser Arg Pro Ser Arg Gly Trp Arg Ser Ser
85 90 95
Arg Thr Ser Val Ser Arg His Arg Asp Thr Glu Asn Thr Arg Ser Ser
100 105 110
Arg Ser Lys Thr Gly Ser Leu Gln Leu Ile Cys Lys Ser Glu Pro Asn
115 120 125
Thr Asp Gln Leu Asp Tyr Asp Val Gly Glu Glu His Gln Ser Pro Gly
130 135 140
Gly Ile Ser Ser Glu Glu Glu Glu Glu Glu Glu Glu Glu Met Leu Ile
145 150 155 160
Ser Glu Glu Glu Ile Pro Phe Lys Asp Asp Pro Arg Asp Glu Thr Tyr
165 170 175
Lys Pro His Leu Glu Arg Glu Thr Pro Lys Pro Arg Arg Lys Ser Gly
180 185 190
Lys Val Lys Glu Glu Lys Glu Lys Lys Glu Ile Lys Val Glu Val Glu
195 200 205
Val Glu Val Lys Glu Glu Glu Asn Glu Ile Arg Glu Asp Glu Glu Pro
210 215 220
Pro Arg Lys Arg Gly Arg Arg Arg Lys Asp Asp Lys Ser Pro Arg Leu
225 230 235 240
Pro Lys Arg Arg Lys Lys Pro Pro Ile Gln Tyr Val Arg Cys Glu Met
245 250 255
Glu Gly Cys Gly Thr Val Leu Ala His Pro Arg Tyr Leu Gln His His
260 265 270
Ile Lys Tyr Gln His Leu Leu Lys Lys Lys Tyr Val Cys Pro His Pro
275 280 285
Ser Cys Gly Arg Leu Phe Arg Leu Gln Lys Gln Leu Leu Arg His Ala
290 295 300
Lys His His Thr Asp Gln Arg Asp Tyr Ile Cys Glu Tyr Cys Ala Arg
305 310 315 320
Ala Phe Lys Ser Ser His Asn Leu Ala Val His Arg Met Ile His Thr
325 330 335
Gly Glu Lys Pro Leu Gln Cys Glu Ile Cys Gly Phe Thr Cys Arg Gln
340 345 350
Lys Ala Ser Leu Asn Trp His Met Lys Lys His Asp Ala Asp Ser Phe
355 360 365
Tyr Gln Phe Ser Cys Asn Ile Cys Gly Lys Lys Phe Glu Lys Lys Asp
370 375 380
Ser Val Val Ala His Lys Ala Lys Ser His Pro Glu Val Leu Ile Ala
385 390 395 400
Glu Ala Leu Ala Ala Asn Ala Gly Ala Leu Ile Thr Ser Thr Asp Ile
405 410 415
Leu Gly Thr Asn Pro Glu Ser
420 423

<210> 1424
<211> 158
<212>Amino acid
<213> Homo sapiens

<400> 1424

```
Met Thr Ala Asn Arg Leu Ala Glu Ser Leu Leu Ala Leu Ser Gln Gln
 1               5                  10                  15
Glu Glu Leu Ala Asp Leu Pro Lys Asp Tyr Leu Leu Ser Glu Ser Glu
            20                  25                  30
Asp Glu Gly Asp Asn Asp Gly Glu Arg Lys His Gln Lys Leu Leu Glu
        35                  40                  45
Ala Ile Ser Ser Leu Asp Gly Lys Asn Arg Arg Lys Leu Ala Glu Arg
    50                  55                  60
Ser Glu Ala Ser Leu Lys Val Ser Glu Phe Asn Val Ser Ser Glu Gly
65                  70                  75                  80
Ser Gly Glu Lys Leu Val Leu Ala Asp Leu Leu Glu Pro Val Lys Thr
                85                  90                  95
Ser Ser Ser Leu Ala Thr Val Lys Lys Gln Leu Ser Arg Val Lys Ser
            100                 105                 110
Lys Lys Thr Val Glu Leu Pro Leu Asn Lys Glu Glu Ile Glu Arg Ile
        115                 120                 125
His Arg Glu Val Ala Phe Asn Lys Thr Ala Gln Val Leu Ser Lys Trp
    130                 135                 140
Asp Pro Val Val Leu Lys Asn Arg Gln Ala Glu Gln Leu  *
145                 150                 155     157
```

<210> 1425
<211> 286
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(286)
<223> X = any amino acid or stop code

<400> 1425

```
Arg Ile Asp Phe Met Phe His Ser Ser Ala Met Val Asn Ser His Arg
 1               5                  10                  15
Lys Pro Met Phe Asn Ile His Arg Gly Phe Tyr Cys Leu Thr Ala Ile
            20                  25                  30
Leu Pro Gln Ile Cys Ile Cys Ser Gln Phe Ser Val Pro Ser Ser Tyr
        35                  40                  45
His Phe Thr Glu Asp Pro Gly Ala Phe Pro Val Ala Thr Asn Gly Glu
    50                  55                  60
Arg Phe Pro Trp Gln Glu Leu Arg Leu Pro Ser Val Val Ile Pro Leu
65                  70                  75                  80
His Tyr Asp Leu Phe Val His Pro Asn Leu Thr Ser Leu Asp Phe Val
                85                  90                  95
Ala Ser Glu Lys Ile Glu Val Leu Val Ser Asn Ala Thr Gln Leu Ile
            100                 105                 110
Ile Leu His Ser Lys Asp Leu Glu Ile Thr Asn Ala Thr Leu Gln Ser
        115                 120                 125
Glu Glu Asp Ser Arg Tyr Met Lys Pro Gly Lys Glu Leu Lys Val Leu
    130                 135                 140
Ser Tyr Pro Ala His Glu Gln Ile Ala Leu Leu Val Pro Glu Lys Leu
145                 150                 155                 160
Thr Pro His Leu Lys Tyr Tyr Val Ala Met Asp Phe Gln Ala Lys Leu
                165                 170                 175
Gly Asp Gly Phe Glu Gly Phe Tyr Lys Ser Thr Tyr Arg Thr Leu Gly
```

```
            180                 185                 190
Gly Glu Thr Arg Ile Leu Ala Val Thr Asp Phe Glu Pro Thr Gln Ala
        195                 200                 205
Arg Met Ala Phe Pro Cys Phe Asp Glu Pro Leu Phe Lys Ala Asn Phe
    210                 215                 220
Ser Ile Lys Ile Arg Arg Glu Ser Arg His Ile Ala Leu Ser Asn Met
225                 230                 235                 240
Pro Lys Val Lys Thr Ile Glu Leu Glu Gly Gly Leu Leu Glu Asp His
                245                 250                 255
Phe Glu Thr Thr Val Lys Met Ser Thr Tyr Leu Val Ala Tyr Ile Asp
            260                 265                 270
Leu Xaa Phe Pro Leu Met Gly Asn Asp Phe Leu Gly Arg Ser
        275                 280                 285 286
```

<210> 1426
<211> 224
<212>Amino acid
<213> Homo sapiens

<400> 1426

```
Arg Ser Lys Ile Pro Arg Ser Asp Pro Arg Val Arg Thr Pro Ala Pro
  1               5                  10                  15
Ala Glu Ala Glu Gln Gly Lys Ser Gln Cys Pro Ser Gly Ser Thr Ala
             20                  25                  30
Gln Ser Trp Ser Ala Met Asp Ile Leu Val Pro Leu Leu Gln Leu Leu
         35                  40                  45
Val Leu Leu Leu Thr Leu Pro Leu His Leu Met Ala Leu Leu Gly Cys
     50                  55                  60
Trp Gln Pro Leu Cys Lys Ser Tyr Phe Pro Tyr Leu Met Ala Val Leu
 65                  70                  75                  80
Thr Pro Lys Ser Asn Arg Lys Met Glu Ser Lys Lys Arg Glu Leu Phe
                 85                  90                  95
Ser Gln Ile Lys Gly Leu Thr Gly Ala Ser Gly Lys Val Ala Leu Leu
            100                 105                 110
Glu Leu Gly Cys Gly Thr Gly Ala Asn Phe Gln Phe Tyr Pro Pro Gly
        115                 120                 125
Cys Arg Val Thr Cys Leu Asp Pro Asn Pro His Phe Glu Lys Phe Leu
    130                 135                 140
Thr Lys Ser Met Ala Glu Asn Arg His Leu Gln Tyr Glu Arg Phe Val
145                 150                 155                 160
Val Ala Pro Gly Glu Asp Met Arg Gln Leu Ala Asp Gly Ser Met Asp
                165                 170                 175
Val Val Val Cys Thr Leu Val Leu Cys Ser Val Gln Ser Pro Arg Lys
            180                 185                 190
Val Leu Gln Glu Val Arg Arg Val Leu Arg Pro Gly Gly Val Leu Phe
        195                 200                 205
Phe Trp Glu His Val Ala Glu Pro Tyr Gly Ser Trp Ala Phe Met Trp
    210                 215                 220             224
```

<210> 1427
<211> 133
<212>Amino acid
<213> Homo sapiens

<400> 1427
Arg Leu Gln Asn Ser Ser Leu Met Asp Pro Lys Leu Gly Arg Met Ala
1 5 10 15
Ala Ser Leu Leu Ala Val Leu Leu Leu Leu Leu Leu Glu Arg Gly Met
20 25 30
Phe Ser Ser Pro Ser Pro Pro Pro Ala Leu Leu Glu Lys Val Phe Gln
35 40 45
Tyr Ile Asp Leu His Gln Asp Glu Phe Val Gln Thr Leu Lys Glu Trp
50 55 60
Val Ala Ile Glu Ser Asp Ser Val Gln Pro Val Pro Arg Phe Arg Gln
65 70 75 80
Glu Leu Phe Arg Met Met Ala Val Ala Ala Asp Thr Leu Gln Arg Leu
85 90 95
Gly Ala Arg Val Ala Ser Val Asp Met Gly Pro Gln Gln Leu Pro Asp
100 105 110
Gly Gln Ser Leu Pro Ile Pro Pro Val Ile Leu Ala Glu Leu Gly Ser
115 120 125
Asp Pro Thr Lys Gly
130 133

<210> 1428
<211> 38
<212>Amino acid
<213> Homo sapiens

<400> 1428
Phe Phe Phe Phe Glu Met Glu Ser Cys Ser Val Thr Gln Ala Gly Val
1 5 10 15
Pro Trp His Asp Leu Ser Ser Leu Gln Pro Pro Pro Pro Arg Phe Lys
20 25 30
Arg Phe Ser Cys Leu Ser
35 38

<210> 1429
<211> 145
<212>Amino acid
<213> Homo sapiens

<400> 1429
Asp Pro Lys Ala Gln Leu Pro Glu Pro Leu Arg Val Leu Trp Thr Ala
1 5 10 15
His Leu Val Ala Met Ala Pro Gly Ser Arg Thr Ser Leu Leu Leu Ala
20 25 30
Phe Ala Leu Leu Cys Leu Pro Trp Leu Gln Glu Ala Gly Ala Val Gln
35 40 45
Thr Val Pro Leu Ser Arg Leu Phe Asp His Ala Met Leu Gln Ala His
50 55 60
Arg Ala His Gln Leu Ala Ile Asp Thr Tyr Gln Glu Phe Glu Glu Thr
65 70 75 80
Tyr Ile Pro Lys Asp Gln Lys Tyr Ser Phe Leu His Asp Ser Gln Thr
85 90 95
Ser Phe Cys Phe Ser Asp Ser Ile Pro Thr Pro Ser Asn Met Glu Glu

```
            100                 105                 110
Thr Gln Gln Lys Ser Asn Leu Glu Leu Leu Arg Ile Ser Leu Leu Leu
        115                 120                 125
Ile Glu Ser Trp Leu Glu Pro Val Arg Ile Leu Met Ser Ile Val Pro
    130                 135                 140
Asn
145
```

<210> 1430
<211> 453
<212>Amino acid
<213> Homo sapiens

<400> 1430

```
Phe Val Lys Leu Ile Lys Lys His Gln Ala Ala Met Glu Lys Glu Ala
  1               5                  10                  15
Lys Val Met Ser Asn Glu Glu Lys Lys Phe Gln Gln His Ile Gln Ala
             20                  25                  30
Gln Gln Lys Lys Glu Leu Asn Ser Phe Leu Glu Ser Gln Lys Arg Glu
         35                  40                  45
Tyr Lys Leu Arg Lys Glu Gln Leu Lys Glu Glu Leu Asn Glu Asn Gln
     50                  55                  60
Ser Thr Pro Lys Lys Glu Lys Gln Glu Trp Leu Ser Lys Gln Lys Glu
 65                  70                  75                  80
Asn Ile Gln His Phe Gln Ala Glu Glu Glu Ala Asn Leu Leu Arg Arg
                 85                  90                  95
Gln Arg Gln Tyr Leu Glu Leu Glu Cys Arg Arg Phe Lys Arg Arg Met
            100                 105                 110
Leu Leu Gly Arg His Asn Leu Glu Gln Asp Leu Val Arg Glu Glu Leu
        115                 120                 125
Asn Lys Arg Gln Thr Gln Lys Asp Leu Glu His Ala Met Leu Leu Arg
    130                 135                 140
Gln His Glu Ser Met Gln Glu Leu Glu Phe Arg His Leu Asn Thr Ile
145                 150                 155                 160
Gln Lys Met Arg Cys Glu Leu Ile Arg Leu Gln His Gln Thr Glu Leu
                165                 170                 175
Thr Asn Gln Leu Glu Tyr Asn Lys Arg Arg Glu Arg Glu Leu Arg Arg
            180                 185                 190
Lys His Val Met Glu Val Arg Gln Gln Pro Lys Ser Leu Lys Ser Lys
        195                 200                 205
Glu Leu Gln Ile Lys Lys Gln Phe Gln Asp Thr Cys Lys Ile Gln Thr
    210                 215                 220
Arg Gln Tyr Lys Ala Leu Arg Asn His Leu Leu Glu Thr Thr Pro Lys
225                 230                 235                 240
Ser Glu His Lys Ala Val Leu Lys Arg Leu Lys Glu Glu Gln Thr Arg
                245                 250                 255
Lys Leu Ala Ile Leu Ala Glu Gln Tyr Asp His Ser Ile Asn Glu Met
            260                 265                 270
Leu Ser Thr Gln Ala Leu Arg Leu Asp Glu Ala Gln Glu Ala Glu Cys
        275                 280                 285
Gln Val Leu Lys Met Gln Leu Gln Gln Glu Leu Glu Leu Leu Asn Ala
    290                 295                 300
Tyr Gln Ser Lys Ile Lys Met Gln Ala Glu Ala Gln His Asp Arg Glu
305                 310                 315                 320
Leu Arg Glu Leu Glu Gln Arg Val Ser Leu Arg Arg Ala Leu Leu Glu
                325                 330                 335
Gln Lys Ile Glu Glu Glu Met Leu Ala Leu Gln Asn Glu Arg Thr Glu
            340                 345                 350
Arg Ile Arg Ser Leu Leu Glu Arg Gln Ala Arg Glu Ile Glu Ala Phe
```

```
        355                 360                 365
Asp Ser Glu Ser Met Arg Leu Gly Phe Ser Asn Met Val Leu Ser Asn
    370                 375                 380
Leu Ser Pro Glu Ala Phe Ser His Ser Tyr Pro Gly Ala Ser Gly Trp
385                 390                 395                 400
Ser His Asn Pro Thr Gly Gly Pro Gly Pro His Trp Gly His Pro Met
                405                 410                 415
Gly Gly Pro Pro Gln Ala Trp Gly His Pro Met Gln Gly Gly Pro Gln
            420                 425                 430
Pro Trp Gly His Pro Ser Gly Pro Met Gln Gly Val Pro Arg Gly Ser
        435                 440                 445
Ser Met Gly Val Arg
    450         453
```

<210> 1431
<211> 151
<212>Amino acid
<213> Homo sapiens

<400> 1431

```
Leu Ala His Gly Ser Phe Gly Val Ser Asp Phe Pro Ala Pro Ala Ala
  1               5                  10                  15
Ala Pro Ala His Thr Leu Thr Ser Phe Ser Gly Ser Leu Ser Pro Gln
             20                  25                  30
Phe Arg Lys Pro Leu Gly Arg Ala Pro Ala Met Pro Leu Val Arg Tyr
         35                  40                  45
Arg Lys Val Val Ile Leu Gly Tyr Arg Cys Val Gly Lys Thr Ser Leu
     50                  55                  60
Ala His Gln Phe Val Glu Gly Glu Phe Ser Glu Gly Tyr Asp Pro Thr
 65                  70                  75                  80
Val Glu Asn Thr Tyr Ser Lys Ile Val Thr Leu Gly Lys Asp Glu Phe
                 85                  90                  95
His Leu His Leu Val Asp Thr Ala Gly Gln Asp Glu Tyr Ser Ile Leu
            100                 105                 110
Pro Tyr Ser Phe Ile Ile Gly Val His Gly Tyr Val Leu Val Tyr Ser
        115                 120                 125
Val Thr Ser Leu His Ser Phe Gln Val Ile Glu Ser Leu Tyr Gln Lys
    130                 135                 140
Leu His Glu Gly His Gly Lys
145                 150 151
```

<210> 1432
<211> 514
<212>Amino acid
<213> Homo sapiens

<400> 1432

```
Ser Ser Pro Ser Arg Glu Leu Cys Phe Tyr Gly Phe Trp Ile Ala Ser
  1               5                  10                  15
Ser Trp Trp Ser Arg Trp Val Gly Ser Leu Gly Pro Gly Ile Leu Pro
             20                  25                  30
Ser Pro Pro Ala Arg Gly Arg Thr Phe Ala Ser Val Ser Arg Leu Pro
         35                  40                  45
Pro Pro Trp Ser Ala Gly Ile Thr Leu Thr Pro Phe Leu Ile Cys Gln
```

```
     50                  55                  60
Ser Gly Ser Val Cys Pro Gly Leu Gly Ala Gly Phe Gly Val Arg Ser
 65                  70                  75                  80
Phe His His Pro Val Ala Arg Ser Ala Val Leu Leu Leu Pro Leu Ala
                 85                  90                  95
Pro Ala Ala Ala Gln Asp Ser Thr Gln Ala Ser Thr Pro Gly Ser Pro
            100                 105                 110
Leu Ser Pro Thr Glu Tyr Glu Arg Phe Phe Ala Leu Leu Thr Pro Thr
        115                 120                 125
Trp Lys Ala Glu Thr Thr Cys Arg Leu Arg Ala Thr His Gly Cys Arg
    130                 135                 140
Asn Pro Thr Leu Val Gln Leu Asp Gln Tyr Glu Asn His Gly Leu Val
145                 150                 155                 160
Pro Asp Gly Ala Val Cys Ser Asn Leu Pro Tyr Ala Ser Trp Phe Glu
                165                 170                 175
Ser Phe Cys Gln Phe Thr His Tyr Arg Cys Ser Asn His Val Tyr Tyr
            180                 185                 190
Ala Lys Arg Val Leu Cys Ser Gln Pro Val Ser Ile Leu Ser Pro Asn
        195                 200                 205
Thr Leu Lys Glu Ile Glu Ala Ser Ala Glu Val Ser Pro Thr Thr Met
    210                 215                 220
Thr Ser Pro Ile Ser Pro His Phe Thr Val Thr Glu Arg Gln Thr Phe
225                 230                 235                 240
Gln Pro Trp Pro Glu Arg Leu Ser Asn Asn Val Glu Glu Leu Leu Gln
                245                 250                 255
Ser Ser Leu Ser Leu Gly Gly Gln Glu Gln Ala Pro Glu His Lys Gln
            260                 265                 270
Glu Gln Gly Val Glu His Arg Gln Glu Pro Thr Gln Glu His Lys Gln
        275                 280                 285
Glu Glu Gly Gln Lys Gln Glu Glu Gln Glu Glu Glu Gln Glu Glu Glu
    290                 295                 300
Gly Lys Gln Glu Glu Gly Gln Gly Thr Lys Glu Gly Arg Glu Ala Val
305                 310                 315                 320
Ser Gln Leu Gln Thr Asp Ser Glu Pro Lys Phe His Ser Glu Ser Leu
                325                 330                 335
Ser Ser Asn Pro Ser Ser Phe Ala Pro Arg Val Arg Glu Val Glu Ser
            340                 345                 350
Thr Pro Met Ile Met Glu Asn Ile Gln Glu Leu Ile Arg Ser Ala Gln
        355                 360                 365
Glu Ile Asp Glu Met Asn Glu Ile Tyr Asp Glu Asn Ser Tyr Trp Arg
    370                 375                 380
Asn Gln Asn Pro Gly Ser Leu Leu Gln Leu Pro His Thr Glu Ala Leu
385                 390                 395                 400
Leu Val Leu Cys Tyr Ser Ile Val Glu Asn Thr Cys Ile Ile Thr Pro
                405                 410                 415
Thr Ala Lys Ala Trp Lys Tyr Met Glu Glu Glu Ile Leu Gly Phe Gly
            420                 425                 430
Lys Ser Val Cys Asp Ser Leu Gly Arg Arg His Met Ser Thr Cys Ala
        435                 440                 445
Leu Cys Asp Phe Cys Ser Leu Lys Leu Glu Gln Cys His Ser Glu Ala
    450                 455                 460
Ser Leu Gln Arg Gln Gln Cys Asp Thr Ser His Lys Thr Pro Phe Val
465                 470                 475                 480
Ser Pro Leu Leu Ala Ser Gln Ser Leu Ser Ile Gly Asn Gln Val Gly
                485                 490                 495
Ser Pro Glu Ser Gly Arg Phe Tyr Gly Leu Asp Leu Tyr Gly Gly Leu
            500                 505                 510
His Met
    514
```

<210> 1433
<211> 241
<212>Amino acid

<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(241)
<223> X = any amino acid or stop code

<400> 1433

```
Val Ser Trp Val Pro Ser Lys Asp Gly Asp Val Glu Gly Ala Arg Arg
 1               5                  10                  15
Pro Phe Thr Arg Leu Asn Thr Ser Leu Gly Pro Gly Leu Gln Glu Gly
            20                  25                  30
Arg Arg Arg Thr Trp Leu Val Pro Ile Pro Gly Ala Val Leu Pro Gly
        35                  40                  45
Arg Thr Gln Glu Gln Pro Arg Ala Ser Pro Leu Tyr Xaa Pro Gly Ala
    50                  55                  60
Pro Pro Cys Gln Pro Gln Gly Leu Val Ala Gly Pro Trp Ala Gln Xaa
65                  70                  75                  80
Ala Gly Leu Arg Ser Asp Gly Phe Gly Pro Trp Pro Trp Arg Leu Val
                85                  90                  95
Gly Thr Ala Gly Pro Arg Glu Lys Lys Val Gln Lys Ser Lys Cys Trp
            100                 105                 110
His Phe Arg Cys Gly Arg His Pro Ala Arg Arg Ser Gly Trp Ala Gly
        115                 120                 125
Arg His Ala Ser Leu Leu Ala Thr Gly Arg Pro Cys Ser Ser Ala Pro
    130                 135                 140
Ser Gln Gln Pro Leu Gly Thr Ala Gly Asp Ser Arg Gln Glu Leu Leu
145                 150                 155                 160
Arg Pro Pro Leu Val Xaa Val Asn Gly Ala Gln Ser Ser Ala Ala Gly
                165                 170                 175
Asp Trp Gly Ser Ser Pro Arg Thr Ala Gln Ala Leu Ala Arg Pro His
            180                 185                 190
Arg Leu Gly His His Pro Ala Ala Val Ala Pro Ala Ala Arg Leu Arg
        195                 200                 205
Thr Gln Ser Gly His Ser Pro Arg Gly Pro Leu Cys Arg Ser Pro Gly
    210                 215                 220
Ser Pro Arg Arg Met Gly Thr Trp Arg Gly Pro Ala Gly His Ser His
225                 230                 235                 240
Asp
241
```

<210> 1434
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1434

```
Lys Thr Val Ala Glu Glu Ala Ser Val Gly Asn Pro Glu Gly Ala Phe
 1               5                  10                  15
Met Lys Met Leu Gln Ala Arg Lys Gln His Met Ser Thr Glu Leu Thr
            20                  25                  30
Ile Glu Ser Glu Ala Pro Ser Asp Ser Ser Gly Ile Asn Leu Ser Gly
        35                  40                  45
Phe Gly Ser Glu Gln Leu Asp Thr Asn Asp Glu Ser Asp Val Ser Ser
    50                  55                  60
```

```
Ala Leu Ser Tyr Ile Leu Pro Tyr Leu Ser Leu Arg Asn Leu Gly Ala
 65                  70                  75                  80
Glu Ser Ile Leu Leu Pro Phe Thr Glu Gln Leu Phe Ser Asn Val Gln
                85                  90                  95
Asp Gly Asp Arg Leu Leu Ser Ile Leu Lys Asn Asn Arg Lys Ser Pro
            100                 105                 110
Ser Gln Ser Ser Leu Leu Gly Asn Lys Phe Lys Asn Lys Ile Phe
        115                 120                 125     127
```

<210> 1435
<211> 182
<212>Amino acid
<213> Homo sapiens

<400> 1435

```
Gly Glu Cys Phe Ile Met Ala Ala Val Val Gln Gln Asn Asp Leu Val
  1               5                  10                  15
Phe Glu Phe Ala Ser Asn Val Met Glu Asp Glu Arg Gln Leu Gly Asp
            20                  25                  30
Pro Ala Ile Phe Pro Ala Val Ile Val Glu His Val Pro Gly Ala Asp
        35                  40                  45
Ile Leu Asn Ser Tyr Ala Gly Leu Ala Cys Val Glu Glu Pro Asn Asp
    50                  55                  60
Met Ile Thr Glu Ser Ser Leu Asp Val Ala Glu Glu Glu Ile Ile Asp
 65                  70                  75                  80
Asp Asp Asp Asp Asp Ile Thr Leu Thr Val Glu Ala Ser Cys His Asp
                85                  90                  95
Gly Asp Glu Thr Ile Glu Thr Ile Glu Ala Ala Glu Ala Leu Leu Asn
            100                 105                 110
Met Asp Ser Pro Gly Pro Met Leu Asp Glu Lys Arg Ile Asn Asn Asn
        115                 120                 125
Ile Phe Ser Ser Pro Glu Asp Asp Met Val Val Ala Pro Val Thr His
    130                 135                 140
Val Ser Val Thr Leu Asp Gly Ile Pro Glu Val Met Glu Thr Gln Gln
145                 150                 155                 160
Val Gln Glu Lys Tyr Ala Asp Ser Pro Gly Ala Ser Ser Pro Glu Gln
                165                 170                 175
Pro Lys Arg Lys Lys Lys
            180     182
```

<210> 1436
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 1436

```
His Glu Ala Ser Gly Val Ser Arg Ala Leu Leu Gln Ser Ala Pro Gly
  1               5                  10                  15
Thr Pro Ala Thr Val Gly Ile Ser Val Gly Glu Leu Trp Pro Phe Ala
            20                  25                  30
Arg Cys Cys Ser His Ser Tyr Val Arg Ser Leu Arg Gly Leu Ser Val
        35                  40                  45
Ser Thr His Leu Leu Cys Phe Thr Ile Tyr Ile Met Asn Pro Ser Met
    50                  55                  60
```

```
Lys Gln Lys Gln Glu Glu Ile Lys Glu Asn Ile Lys Thr Ser Ser Val
 65                  70                  75                  80
Pro Arg Arg Thr Leu Lys Met Ile Gln Pro Ser Ala Ser Gly Ser Leu
                 85                  90                  95
Val Gly Arg Glu Asn Glu Leu Ser Ala Gly Leu Ser Lys Arg Lys His
            100                 105                 110
Arg Asn Asp His Leu Thr Ser Thr Thr Ser Ser Pro Gly Val Ile Val
        115                 120                 125
Pro Glu Ser Ser Glu Asn Lys Asn Leu Gly Gly Val Thr Gln Glu Ser
    130                 135                 140
Phe Asp Leu Met Ile Lys Gly Met Lys Lys
145                 150             154
```

<210> 1437
<211> 63
<212>Amino acid
<213> Homo sapiens

<400> 1437

```
Pro Leu Pro Ala Arg Gly Lys Ser Thr Leu Pro Ala Thr Phe Cys Ser
  1               5                  10                  15
Pro Ser Ala Pro Glu Leu Ala Ser Met Ser Val Val Pro Pro Asn Arg
            20                  25                  30
Ser Gln Thr Gly Trp Pro Arg Gly Val Thr Gln Phe Gly Asn Lys Tyr
        35                  40                  45
Ile Gln Gln Thr Lys Pro Leu Thr Leu Glu Arg Thr Ile Asn Leu
    50                  55                  60          63
```

<210> 1438
<211> 140
<212>Amino acid
<213> Homo sapiens

<400> 1438

```
Ala Glu Gly Glu Asp Val Pro Pro Leu Pro Thr Ser Ser Gly Asp Gly
  1               5                  10                  15
Trp Glu Lys Asp Leu Glu Glu Ala Leu Glu Ala Gly Gly Cys Asp Leu
            20                  25                  30
Glu Thr Leu Arg Asn Ile Ile Gln Gly Arg Pro Leu Pro Ala Asp Leu
        35                  40                  45
Arg Ala Lys Val Trp Lys Ile Ala Leu Asn Val Ala Gly Lys Gly Asp
    50                  55                  60
Ser Leu Ala Ser Trp Asp Gly Ile Leu Asp Leu Pro Glu Gln Asn Thr
 65                  70                  75                  80
Ile His Lys Asp Cys Leu Gln Phe Ile Asp Gln Leu Ser Val Pro Glu
                 85                  90                  95
Glu Lys Ala Ala Glu Leu Leu Leu Asp Ile Glu Ser Val Ile Thr Phe
            100                 105                 110
Tyr Cys Lys Ser Arg Asn Ile Lys Tyr Ser Thr Ser Leu Ser Trp Ile
        115                 120                 125
His Leu Leu Lys Pro Leu Val His Leu Gln Leu Pro
    130                 135                 140
```

<210> 1439
<211> 84
<212>Amino acid
<213> Homo sapiens

<400> 1439

```
Ala Leu Pro Lys Phe Leu Thr His Gly Val Lys Ser Asn Glu Arg Val
 1               5                  10                  15
Val Val Trp Leu Phe Pro Pro Ser Phe Arg Ala Ala Thr Met Val His
            20                  25                  30
Met Asn Val Leu Pro Asp Ala Leu Lys Ser Ile Asn Asn Ala Glu Arg
        35                  40                  45
Arg Gly Lys Pro Gln Val Leu Ile Arg Leu Cys Ser Lys Ile Ile Ile
    50                  55                  60
Trp Phe Leu Thr Val Met Val Lys Tyr Gly Tyr Ile Gly Lys Phe Glu
65                  70                  75                  80
Pro Thr Arg Pro
            84
```

<210> 1440
<211> 255
<212>Amino acid
<213> Homo sapiens

<400> 1440

```
Ala Met Ala Gln Tyr Gly His Pro Ser Pro Leu Gly Met Ala Ala Arg
 1               5                  10                  15
Glu Glu Leu Tyr Ser Lys Val Thr Pro Arg Arg Asn Arg Gln Gln Arg
            20                  25                  30
Pro Gly Thr Ile Lys His Gly Ser Ala Leu Asp Val Leu Leu Ser Met
        35                  40                  45
Gly Phe Pro Arg Ala Arg Ala Gln Lys Ala Leu Ala Ser Thr Gly Gly
    50                  55                  60
Arg Ser Val Gln Ala Ala Cys Asp Trp Leu Phe Ser His Val Gly Asp
65                  70                  75                  80
Pro Phe Leu Asp Asp Pro Leu Pro Arg Glu Tyr Val Leu Tyr Leu Arg
                85                  90                  95
Pro Thr Gly Pro Leu Ala Gln Lys Leu Ser Asp Phe Trp Gln Gln Ser
            100                 105                 110
Lys Gln Ile Cys Gly Lys Asn Lys Ala His Asn Ile Phe Pro His Ile
        115                 120                 125
Thr Leu Cys Gln Phe Phe Met Cys Glu Asp Ser Lys Val Asp Ala Leu
    130                 135                 140
Gly Glu Ala Leu Gln Thr Thr Val Ser Arg Trp Lys Cys Lys Phe Ser
145                 150                 155                 160
Ala Pro Leu Pro Leu Glu Leu Tyr Thr Ser Ser Asn Phe Ile Gly Leu
                165                 170                 175
Phe Val Lys Glu Asp Ser Ala Glu Val Leu Lys Lys Phe Ala Ala Asp
            180                 185                 190
Phe Ala Ala Glu Ala Ala Ser Lys Thr Glu Val His Val Glu Pro His
        195                 200                 205
Lys Lys Gln Leu His Val Thr Leu Ala Tyr His Phe Gln Ala Ser His
    210                 215                 220
Leu Pro Thr Leu Glu Lys Leu Ala Gln Asn Ile Asp Val Lys Leu Gly
225                 230                 235                 240
```

```
Cys Asp Trp Val Ala Thr Ile Phe Ser Arg Asp Ile Arg Phe Ala
                245                 250                 255
```

<210> 1441
<211> 134
<212>Amino acid
<213> Homo sapiens

<400> 1441

```
Gln Thr Arg Pro Ala Ser Pro Arg Thr Ala Arg Glu Ser Val Leu Gly
  1               5                  10                  15
Val Ser Gln Asn Met Ser Phe Asn Leu Gln Ser Ser Lys Lys Leu Phe
             20                  25                  30
Ile Phe Leu Gly Lys Ser Leu Phe Ser Leu Leu Glu Ala Met Ile Phe
         35                  40                  45
Ala Leu Leu Pro Lys Pro Arg Lys Asn Val Ala Gly Glu Ile Val Leu
     50                  55                  60
Ile Thr Gly Ala Gly Ser Gly Leu Gly Arg Leu Leu Ala Leu Gln Phe
 65                  70                  75                  80
Ala Arg Leu Gly Ser Val Leu Val Leu Trp Asp Ile Asn Lys Glu Gly
                 85                  90                  95
Asn Glu Glu Thr Cys Lys Met Ala Arg Glu Ala Gly Ala Thr Arg Val
            100                 105                 110
His Ala Tyr Thr Cys Asp Cys Ser Gln Lys Glu Gly Val Tyr Arg Val
        115                 120                 125
Ala Asp Gln Val Lys Lys
    130             134
```

<210> 1442
<211> 155
<212>Amino acid
<213> Homo sapiens

<400> 1442

```
Met Val Ala Arg Lys Gly Gln Lys Ser Pro Arg Phe Arg Arg Val Thr
  1               5                  10                  15
Cys Phe Leu Arg Leu Gly Arg Ser Thr Leu Leu Glu Leu Glu Pro Ala
             20                  25                  30
Gly Arg Pro Cys Ser Gly Arg Thr Arg His Arg Ala Leu His Arg Arg
         35                  40                  45
Leu Val Ala Cys Val Thr Val Ser Ser Arg Arg His Arg Lys Glu Ala
     50                  55                  60
Gly Arg Gly Arg Ala Glu Ser Phe Ile Ala Val Gly Met Ala Ala Pro
 65                  70                  75                  80
Ser Met Lys Glu Arg Gln Val Cys Trp Gly Ala Arg Asp Glu Tyr Trp
                 85                  90                  95
Lys Cys Leu Asp Glu Asn Leu Glu Asp Ala Ser Gln Cys Lys Lys Leu
            100                 105                 110
Arg Ser Ser Phe Glu Ser Ser Cys Pro Gln Gln Trp Ile Lys Tyr Phe
        115                 120                 125
Asp Lys Arg Arg Asp Tyr Leu Lys Phe Lys Glu Lys Phe Glu Ala Gly
    130                 135                 140
Gln Phe Glu Pro Ser Glu Thr Thr Ala Lys Ser
145                 150                 155
```

<210> 1443
<211> 157
<212>Amino acid
<213> Homo sapiens

<400> 1443

```
Pro Ala Pro Ala Ala Arg Ser Arg Glu Leu Leu Lys Glu Leu Arg Asn
  1               5                  10                  15
Gly Gln Asp Met Asp Thr Val Val Phe Glu Asp Val Val Val Asp Phe
            20                  25                  30
Thr Leu Glu Glu Trp Ala Leu Leu Asn Pro Ala Gln Arg Lys Leu Tyr
        35                  40                  45
Arg Asp Val Met Leu Glu Thr Phe Lys His Leu Ala Ser Val Asp Asn
    50                  55                  60
Glu Ala Gln Leu Lys Ala Ser Gly Ser Ile Ser Gln Gln Asp Thr Ser
65                  70                  75                  80
Gly Glu Lys Leu Ser Leu Lys Gln Lys Ile Glu Lys Phe Thr Arg Lys
                85                  90                  95
Asn Ile Trp Ala Ser Leu Leu Gly Lys Asn Trp Glu Glu His Ser Val
            100                 105                 110
Lys Asp Lys His Asn Thr Lys Glu Arg His Leu Ser Arg Asn Pro Arg
        115                 120                 125
Val Glu Arg Pro Cys Lys Ser Ser Lys Gly Asn Lys Arg Gly Arg Thr
    130                 135                 140
Phe Arg Lys Thr Arg Asn Cys Asn Arg His Leu Arg Arg
145                 150                 155     157
```

<210> 1444
<211> 53
<212>Amino acid
<213> Homo sapiens

<400> 1444

```
Cys Val Cys Gly Phe Phe Val Cys Phe Glu Thr Lys Ser Cys Phe Val
  1               5                  10                  15
Ala Gln Ala Gly Val Gln Trp His Asn Leu Ser Ser Leu Gln Ala Leu
            20                  25                  30
Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp
        35                  40                  45
His Tyr Arg Arg Val
    50          53
```

<210> 1445
<211> 106
<212>Amino acid
<213> Homo sapiens

<400> 1445

```
Gly Thr Arg Leu Arg Arg Arg Arg Glu Ala Val Trp Phe Glu Val Val
 1               5                  10                  15
Asn Met Asp Phe Ser Arg Leu His Met Tyr Ser Pro Pro Gln Cys Val
            20                  25                  30
Pro Glu Asn Thr Gly Tyr Thr Tyr Ala Leu Ser Ser Ser Tyr Ser Ser
        35                  40                  45
Asp Ala Leu Asp Phe Glu Thr Glu His Lys Leu Asp Pro Val Phe Asp
    50                  55                  60
Ser Pro Arg Met Ser Arg Arg Ser Leu Arg Leu Ala Thr Thr Ala Cys
65                  70                  75                  80
Thr Leu Gly Asp Gly Glu Ala Val Gly Ala Asp Ser Gly Thr Ser Ser
                85                  90                  95
Ala Val Ser Leu Lys Asn Arg Ala Ala Arg
            100                 105 106
```

<210> 1446
<211> 95
<212>Amino acid
<213> Homo sapiens

<400> 1446

```
Asp Thr Met Gln Ala Val Val Pro Leu Asn Lys Met Thr Ala Ile Ser
 1               5                  10                  15
Pro Glu Pro Gln Thr Leu Ala Ser Thr Glu Gln Asn Glu Val Pro Arg
            20                  25                  30
Val Val Thr Ser Gly Glu Gln Glu Ala Ile Leu Arg Gly Asn Ala Ala
        35                  40                  45
Asp Ala Glu Ser Phe Arg Gln Arg Phe Arg Trp Phe Cys Tyr Ser Glu
    50                  55                  60
Val Ala Gly Pro Arg Lys Ala Leu Ser Gln Leu Trp Glu Leu Cys Asn
65                  70                  75                  80
Gln Trp Leu Arg Pro Asp Ile His Thr Lys Glu Gln Ile Leu Glu
                85                  90                  95
```

<210> 1447
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1447

```
Pro Ile Cys Leu Phe Ser Arg Pro Thr Leu Arg Pro Ser Arg Ser Lys
 1               5                  10                  15
Val Ser Leu Ile Glu Gly Arg Gly Ala Asn Met Ala Ala Arg Trp Arg
            20                  25                  30
Phe Trp Cys Val Ser Val Thr Met Val Val Ala Leu Leu Ile Val Cys
        35                  40                  45
Asp Val Pro Ser Ala Ser Ala Gln Arg Lys Lys Glu Met Val Leu Ser
    50                  55                  60
Glu Lys Val Ser Gln Leu Met Glu Trp Thr Asn Lys Arg Pro Val Ile
65                  70                  75                  80
Arg Met Asn Gly Asp Lys Phe Arg Arg Leu Val Lys Ala Pro Pro Arg
                85                  90                  95
Asn Tyr Ser Val Ile Val Met Phe Thr Ala Leu Gln Leu His Arg Gln
            100                 105                 110
```

```
Cys Val Val Cys Lys Tyr Glu Leu Gln Leu Arg Phe Lys Ile Lys
        115                 120                 125     127


     <210> 1448
     <211> 143
     <212>Amino acid
     <213> Homo sapiens



     <400> 1448
Gln Met Arg Val Lys Asp Pro Thr Lys Ala Leu Pro Glu Lys Ala Lys
  1               5                  10                  15
Arg Ser Lys Arg Pro Thr Val Pro His Asp Glu Asp Ser Ser Asp Asp
             20                  25                  30
Ile Ala Val Gly Leu Thr Cys Gln His Val Ser His Ala Ile Ser Val
         35                  40                  45
Asn His Val Lys Arg Ala Ile Ala Glu Asn Leu Trp Ser Val Cys Ser
     50                  55                  60
Glu Cys Leu Lys Glu Arg Arg Phe Tyr Asp Gly Gln Leu Val Leu Thr
 65                  70                  75                  80
Ser Asp Ile Trp Leu Cys Leu Lys Cys Gly Phe Gln Gly Cys Gly Lys
                 85                  90                  95
Asn Ser Glu Ser Gln His Ser Leu Lys His Phe Lys Ser Ser Arg Thr
            100                 105                 110
Glu Pro His Cys Ile Ile Ile Asn Leu Ser Thr Trp Ile Ile Trp Trp
        115                 120                 125
Tyr Glu Trp Asp Glu Lys Ile Phe Thr Pro Leu Asn Lys Lys Gly
    130                 135                 140         143


     <210> 1449
     <211> 121
     <212>Amino acid
     <213> Homo sapiens

     <220>
     <221> misc_feature
     <222> (1)...(121)
     <223> X = any amino acid or stop code



     <400> 1449
Ala Lys Glu Arg Gly Glu Glu Arg Gln Gly Glu Gly Gly Gly Trp Leu
  1               5                  10                  15
Ser Gly Ser Arg Trp Pro Leu Val Arg Ser Ala Phe Val Pro Ala Pro
             20                  25                  30
Ser Ser Leu Ile Leu Ser Met Cys Leu Ser Pro Gly Ile Pro Glu Ala
         35                  40                  45
Ala Pro Asp Ser Pro Leu Thr Ala Ser Ala Pro Thr Pro Xaa Val Met
     50                  55                  60
Leu Leu Gly Asp Thr Gly Val Gly Lys Thr Cys Phe Leu Ile Gln Phe
 65                  70                  75                  80
Lys Asp Gly Ala Phe Leu Ser Gly Thr Phe Ile Ala Thr Val Gly Ile
                 85                  90                  95
Asp Phe Arg Val Arg Trp Leu Gln Ala Leu Ala Ser Ser Arg Glu Pro
            100                 105                 110
Gly Leu Trp Leu Arg His Gly Gly Val
```

115 120 121

<210> 1450
<211> 76
<212>Amino acid
<213> Homo sapiens

<400> 1450
Phe Tyr Pro Arg Ser Ser Ala Asp Leu Pro Phe Gln Thr Thr Arg Cys
1 5 10 15
Glu Phe Gln Thr Ser Val Met Glu Leu Ala His Ser Leu Leu Leu Asn
20 25 30
Glu Glu Ala Leu Ala Gln Ile Thr Glu Ala Lys Arg Pro Val Phe Ile
35 40 45
Phe Glu Trp Leu Arg Phe Leu Asp Lys Val Leu Val Ala Ala Asn Lys
50 55 60
Val Trp Tyr Cys Ser Phe Phe Pro Val Ala Leu Thr
65 70 75 76

<210> 1451
<211> 95
<212>Amino acid
<213> Homo sapiens

<400> 1451
Met Asn Met Lys Gln Lys Ser Val Tyr Gln Gln Thr Lys Ala Leu Leu
1 5 10 15
Cys Lys Asn Phe Leu Lys Lys Trp Arg Met Lys Arg Glu Ser Leu Leu
20 25 30
Glu Trp Gly Leu Ser Ile Leu Leu Gly Leu Cys Ile Ala Leu Phe Ser
35 40 45
Ser Ser Met Arg Asn Val Gln Phe Pro Gly Met Ala Pro Gln Asn Leu
50 55 60
Gly Arg Val Asp Lys Phe Asn Ser Ser Ser Leu Met Val Val Tyr Thr
65 70 75 80
Pro Ile Ser Asn Leu Thr Gln Gln Ile Met Asn Lys Thr Ala Leu
85 90 95

<210> 1452
<211> 174
<212>Amino acid
<213> Homo sapiens

<400> 1452
Ser Pro Gln Gly Asn Gly Cys Pro Asp Val Thr Gly Asp Ser Val Ile
1 5 10 15
Arg Val Pro Leu Thr Leu Leu Val His Asn Leu Ala Gly Leu Thr Gly
20 25 30
Leu Leu His His Cys Leu Ser Gly Pro Leu Pro Ala Pro Ser Pro Pro

```
         35                  40                  45
Pro Ala Met Ser Ser Ser Arg Lys Asp His Leu Gly Ala Ser Ser Ser
     50                  55                  60
Glu Pro Leu Pro Val Ile Ile Val Gly Asn Gly Pro Ser Gly Ile Cys
 65                  70                  75                  80
Leu Ser Tyr Leu Leu Ser Gly Tyr Thr Pro Tyr Thr Lys Pro Asp Ala
                85                  90                  95
Ile His Pro His Pro Leu Leu Gln Arg Lys Leu Thr Glu Ala Pro Gly
            100                 105                 110
Val Ser Ile Leu Asp Gln Asp Leu Asp Tyr Leu Ser Glu Gly Leu Glu
        115                 120                 125
Gly Arg Ser Gln Ser Pro Val Ala Leu Leu Phe Asp Ala Leu Leu Arg
    130                 135                 140
Pro Asp Thr Asp Phe Gly Gly Asn Met Lys Ser Val Leu Thr Trp Lys
145                 150                 155                 160
His Arg Lys Glu His Ala Ile Pro His Val Val Leu Gly Arg
                165                 170             174
```

<210> 1453
<211> 518
<212>Amino acid
<213> Homo sapiens

<400> 1453

```
Asn Arg Arg Thr Arg Ala Gln Arg Cys Gln Arg Gly Arg Ser Cys Gly
  1               5                  10                  15
Ala Arg Glu Glu Glu Val Glu Pro Gly Thr Ala Arg Pro Pro Pro Ala
            20                  25                  30
Ala Ser Ala Met Asp Ala Ser Leu Glu Lys Ile Ala Asp Pro Thr Leu
        35                  40                  45
Ala Glu Met Gly Lys Asn Leu Lys Glu Ala Val Lys Met Leu Glu Asp
    50                  55                  60
Ser Gln Arg Arg Thr Glu Glu Glu Asn Gly Lys Lys Leu Ile Ser Gly
65                  70                  75                  80
Asp Ile Pro Gly Pro Leu Gln Gly Ser Gly Gln Asp Met Val Ser Ile
                85                  90                  95
Leu Gln Leu Val Gln Asn Leu Met His Gly Asp Glu Asp Glu Glu Pro
            100                 105                 110
Gln Ser Pro Arg Ile Gln Asn Ile Gly Glu Gln Gly His Met Ala Leu
        115                 120                 125
Leu Gly His Ser Leu Gly Ala Tyr Ile Ser Thr Leu Asp Lys Glu Lys
    130                 135                 140
Leu Arg Lys Leu Thr Thr Arg Ile Leu Ser Asp Thr Thr Leu Trp Leu
145                 150                 155                 160
Cys Arg Ile Phe Arg Tyr Glu Asn Gly Cys Ala Tyr Phe His Glu Glu
                165                 170                 175
Glu Arg Glu Gly Leu Ala Lys Ile Cys Arg Leu Ala Ile His Ser Arg
            180                 185                 190
Tyr Glu Asp Phe Val Val Asp Gly Phe Asn Val Leu Tyr Asn Lys Lys
        195                 200                 205
Pro Val Ile Tyr Leu Ser Ala Ala Ala Arg Pro Gly Leu Gly Gln Tyr
    210                 215                 220
Leu Cys Asn Gln Leu Gly Leu Pro Phe Pro Cys Leu Cys Arg Val Pro
225                 230                 235                 240
Cys Asn Thr Val Phe Gly Ser Gln His Gln Met Asp Val Ala Phe Leu
                245                 250                 255
Glu Lys Leu Ile Lys Asp Asp Ile Glu Arg Gly Arg Leu Pro Leu Leu
            260                 265                 270
Leu Val Ala Asn Ala Gly Thr Ala Ala Val Gly His Thr Asp Lys Ile
```

```
        275                 280                 285
Gly Arg Leu Lys Glu Leu Cys Glu Gln Tyr Gly Ile Trp Leu His Val
    290                 295                 300
Glu Gly Val Asn Leu Ala Thr Leu Ala Leu Gly Tyr Val Ser Ser Ser
305                 310                 315                 320
Val Leu Ala Ala Ala Lys Cys Asp Ser Met Thr Met Thr Pro Gly Pro
                325                 330                 335
Trp Leu Gly Leu Pro Ala Val Pro Ala Val Thr Leu Tyr Lys His Asp
            340                 345                 350
Asp Pro Ala Leu Thr Leu Val Ala Gly Leu Thr Ser Asn Lys Pro Thr
        355                 360                 365
Asp Lys Leu Arg Ala Leu Pro Leu Trp Leu Ser Leu Gln Tyr Leu Gly
    370                 375                 380
Leu Asp Gly Phe Val Glu Arg Ile Lys His Ala Cys Gln Leu Ser Gln
385                 390                 395                 400
Arg Leu Gln Glu Ser Leu Lys Lys Val Asn Tyr Ile Lys Ile Leu Val
                405                 410                 415
Glu Asp Glu Leu Ser Ser Pro Val Val Val Phe Arg Phe Phe Gln Glu
            420                 425                 430
Leu Pro Gly Ser Asp Pro Val Phe Lys Ala Val Pro Val Pro Asn Met
        435                 440                 445
Thr Pro Ser Gly Val Gly Arg Glu Arg His Ser Cys Asp Ala Leu Asn
    450                 455                 460
Arg Trp Leu Gly Glu Gln Leu Lys Gln Leu Val Pro Ala Ser Gly Leu
465                 470                 475                 480
Thr Val Met Asp Leu Glu Ala Glu Gly Thr Cys Leu Arg Phe Ser Pro
                485                 490                 495
Leu Met Thr Ala Ala Gly Lys Pro Gly Leu Val Asp Ile Pro Cys Phe
            500                 505                 510
Cys Ser Gly Ala Ala Gly
        515         518
```

<210> 1454
<211> 185
<212>Amino acid
<213> Homo sapiens

<400> 1454

```
Leu Cys Ile Met Asp Thr Lys Glu Glu Lys Lys Glu Arg Lys Gln Ser
  1               5                  10                  15
Tyr Phe Ala Arg Leu Lys Lys Lys Lys Gln Ala Lys Gln Asn Ala Glu
             20                  25                  30
Thr Ala Ser Ala Val Ala Thr Arg Thr His Thr Gly Lys Glu Asp Asn
         35                  40                  45
Asn Thr Val Val Leu Glu Pro Asp Lys Cys Asn Ile Ala Val Glu Glu
     50                  55                  60
Glu Tyr Met Thr Asp Glu Lys Lys Lys Arg Lys Ser Asn Gln Leu Lys
 65                  70                  75                  80
Glu Ile Arg Arg Thr Glu Leu Lys Arg Tyr Tyr Ser Ile Asp Asp Asn
                 85                  90                  95
Gln Asn Lys Thr His Asp Lys Lys Glu Lys Lys Met Val Val Gln Lys
            100                 105                 110
Pro His Gly Thr Met Glu Tyr Thr Ala Gly Asn Gln Asp Thr Leu Asn
        115                 120                 125
Ser Ile Ala Leu Lys Phe Asn Ile Thr Pro Asn Lys Leu Val Glu Leu
    130                 135                 140
Asn Lys Leu Phe Thr His Thr Ile Val Pro Gly Gln Val Leu Phe Val
145                 150                 155                 160
Pro Asp Ala Asn Ser Pro Ser Ser Thr Leu Arg Leu Ser Ser Ser Ser
```

```
                165                 170                 175
Pro Gly Ala Thr Val Ser Pro Ser Ser
            180                 185
```

<210> 1455
<211> 206
<212>Amino acid
<213> Homo sapiens

<400> 1455

```
Ser Ala Gly Gly Asp Ser Cys Arg Ala Val Pro Met Leu Arg Phe Pro
  1               5                  10                  15
Thr Cys Phe Pro Ser Phe Arg Val Val Gly Glu Lys Gln Leu Pro Gln
             20                  25                  30
Glu Ile Ile Phe Leu Val Trp Ser Pro Lys Arg Asp Leu Ile Ala Leu
         35                  40                  45
Ala Asn Thr Ala Gly Glu Val Leu Leu His Arg Leu Ala Ser Phe His
     50                  55                  60
Arg Val Trp Ser Phe Pro Pro Asn Glu Asn Thr Gly Lys Glu Val Thr
 65                  70                  75                  80
Cys Leu Ala Trp Arg Pro Asp Gly Lys Leu Leu Ala Phe Ala Leu Ala
                 85                  90                  95
Asp Thr Lys Lys Ile Val Leu Cys Asp Val Glu Lys Pro Glu Ser Leu
            100                 105                 110
His Ser Phe Ser Val Glu Ala Pro Val Ser Cys Met His Trp Met Glu
        115                 120                 125
Val Thr Val Glu Ser Ser Val Leu Thr Ser Phe Tyr Asn Ala Glu Asp
    130                 135                 140
Glu Ser Asn Leu Leu Leu Pro Lys Leu Pro Thr Leu Pro Lys Asn Tyr
145                 150                 155                 160
Ser Asn Thr Ser Lys Ile Phe Ser Glu Glu Asn Ser Asp Glu Ile Ile
                165                 170                 175
Lys Leu Leu Gly Asp Val Arg Leu Asn Ile Leu Val Leu Gly Gly Ser
            180                 185                 190
Ser Gly Phe Ile Glu Leu Tyr Ala Tyr Gly Met Phe Lys Ile
        195                 200                 205 206
```

<210> 1456
<211> 100
<212>Amino acid
<213> Homo sapiens

<400> 1456

```
Pro Arg Asp Pro Val Thr Asp Arg Ala Arg Ala Met Pro Arg Arg Gly
  1               5                  10                  15
Leu Val Ala Gly Pro Asp Leu Glu Tyr Phe Gln Arg His Tyr Phe Thr
             20                  25                  30
Pro Ala Glu Val Ala Gln His Asn Arg Pro Glu Asp Leu Trp Val Ser
         35                  40                  45
Tyr Leu Gly Arg Val Tyr Asp Leu Thr Ser Leu Ala Gln Glu Tyr Lys
     50                  55                  60
Gly Asn Leu Leu Leu Lys Pro Ile Val Glu Val Ala Gly Gln Asp Ile
 65                  70                  75                  80
Ser His Trp Phe Asp Pro Lys Thr Arg Asp Val Ser Tyr Ala Gly Thr
```

85 90 95
Trp Asp Cys Gly
100

<210> 1457
<211> 159
<212>Amino acid
<213> Homo sapiens

<400> 1457
Arg Ile Pro Gly Arg Arg Phe Arg Ala Ala Phe Val Leu Gly Ser Ala
1 5 10 15
Asn Val Ala Ser Ser Val Arg Leu Arg Cys Ser Phe Pro Leu Ser Leu
20 25 30
Gly Gly Pro Ser Gly Pro Ala Ala Ala Ser Val Ala Leu Gly Pro Ala
35 40 45
Gly Pro Gly Arg Ser Leu Gly Arg Thr Pro Asp Thr Gly Asp Trp Glu
50 55 60
Met Asp Ser Val Ser Phe Glu Asp Val Ala Val Ala Phe Thr Gln Glu
65 70 75 80
Glu Trp Ala Leu Leu Asp Pro Ser Gln Lys Asn Leu Tyr Arg Asp Val
85 90 95
Met Gln Glu Ile Phe Arg Asn Leu Ala Ser Val Gly Asn Lys Ser Glu
100 105 110
Asp Gln Asn Ile Gln Asp Asp Phe Lys Asn Pro Gly Arg Asn Leu Ser
115 120 125
Ser His Val Val Glu Arg Leu Phe Glu Ile Lys Glu Gly Ser Gln Tyr
130 135 140
Gly Glu Thr Phe Ser Gln Asp Ser Asn Leu Asn Leu Asn Lys Ile
145 150 155 159

<210> 1458
<211> 154
<212>Amino acid
<213> Homo sapiens

<400> 1458
Ser Leu Ser Leu Ser Val Ser Pro Phe Leu Arg Leu Ser Leu Gly Arg
1 5 10 15
Val Gly Gly Met Ala Glu Glu Met Glu Ser Ser Leu Glu Ala Ser Phe
20 25 30
Ser Ser Ser Gly Ala Val Ser Gly Ala Ser Gly Phe Leu Pro Pro Ala
35 40 45
Arg Ser Arg Ile Phe Lys Ile Ile Val Ile Gly Asp Ser Asn Val Gly
50 55 60
Lys Thr Cys Leu Thr Tyr Arg Phe Cys Ala Gly Arg Phe Pro Asp Arg
65 70 75 80
Thr Glu Ala Thr Ile Gly Val Asp Phe Arg Glu Arg Ala Val Glu Ile
85 90 95
Asp Gly Glu Arg Ile Lys Ile Gln Leu Trp Asp Thr Ala Gly Gln Glu
100 105 110
Arg Phe Arg Lys Ser Met Val Gln His Tyr Tyr Arg Asn Val His Ala
115 120 125
Val Val Phe Val Tyr Asp Met Thr Asn Met Ala Ser Phe His Ser Leu

```
   130                 135                 140
Pro Ser Trp Ile Glu Glu Cys Lys Gln His
145                 150             154
```

<210> 1459
<211> 136
<212>Amino acid
<213> Homo sapiens

<400> 1459

```
Arg Arg Pro Ser Pro Gly Ser Ile Val Ile Met Ala Ala Glu Ser Asp
  1               5                  10                  15
Val Leu His Phe Gln Phe Glu Gln Gln Gly Asp Val Val Leu Gln Lys
            20                  25                  30
Met Asn Leu Leu Arg Gln Gln Asn Leu Phe Cys Asp Val Ser Ile Tyr
        35                  40                  45
Ile Asn Asp Thr Glu Phe Gln Gly His Lys Val Ile Leu Ala Ala Cys
    50                  55                  60
Ser Thr Phe Met Arg Asp Gln Phe Leu Leu Thr Gln Ser Lys His Val
65                  70                  75                  80
Arg Ile Thr Ile Leu Gln Ser Ala Glu Val Gly Arg Lys Leu Leu Leu
                85                  90                  95
Ser Cys Tyr Thr Gly Ala Leu Glu Val Lys Arg Lys Glu Leu Leu Lys
            100                 105                 110
Tyr Leu Thr Ala Ala Ser Tyr Leu Gln Met Val His Ile Ala Glu Lys
        115                 120                 125
Arg Thr Glu Ala Phe Val Lys Phe
    130                 135 136
```

<210> 1460
<211> 219
<212>Amino acid
<213> Homo sapiens

<400> 1460

```
Ala Glu Gly Leu Gln Ser Ala Ala Gly Ile Arg Ile Asp Thr Lys Ala
  1               5                  10                  15
Gly Pro Pro Glu Met Leu Lys Pro Leu Trp Lys Ala Ala Val Ala Pro
            20                  25                  30
Thr Trp Pro Cys Ser Met Pro Pro Arg Arg Pro Trp Asp Arg Gln Ala
        35                  40                  45
Gly Thr Leu Gln Val Leu Gly Ala Leu Ala Val Leu Trp Leu Gly Ser
    50                  55                  60
Val Ala Leu Ile Cys Leu Leu Trp Gln Val Pro Arg Pro Pro Thr Trp
65                  70                  75                  80
Gly Gln Val Gln Pro Lys Asp Val Pro Arg Ser Trp Glu His Gly Ser
                85                  90                  95
Ser Pro Ala Trp Glu Pro Leu Glu Ala Glu Ala Arg Gln Gln Arg Asp
            100                 105                 110
Ser Cys Gln Leu Val Leu Val Glu Ser Ile Pro Gln Asp Leu Pro Ser
        115                 120                 125
Ala Ala Gly Ser Pro Ser Ala Gln Pro Leu Gly Gln Ala Trp Leu Gln
    130                 135                 140
Leu Leu Asp Thr Ala Gln Glu Ser Val His Val Ala Ser Tyr Tyr Trp
```

```
145                 150                 155                 160
Ser Leu Thr Gly Pro Asp Ile Gly Val Asn Asp Ser Ser Ser Gln Leu
                165                 170                 175
Gly Glu Ala Leu Leu Gln Lys Leu Gln Gln Leu Leu Gly Arg Asn Ile
            180                 185                 190
Ser Leu Ala Val Ala Thr Ser Ser Pro Thr Leu Ala Arg Thr Ser Thr
        195                 200                 205
Asp Leu Gln Val Leu Ala Ala Arg Gly Ala His
    210                 215             219
```

<210> 1461
<211> 80
<212>Amino acid
<213> Homo sapiens

<400> 1461

```
Arg Lys Lys Lys Met Pro Leu Pro Phe Gly Leu Lys Leu Lys Arg Thr
  1                 5                  10                  15
Arg Arg Tyr Thr Val Ser Ser Lys Ser Cys Leu Val Ala Arg Ile Gln
            20                  25                  30
Leu Leu Asn Asn Glu Phe Val Glu Phe Thr Leu Ser Val Glu Ser Thr
        35                  40                  45
Gly Gln Glu Ser Leu Glu Ala Val Ala Gln Arg Leu Glu Leu Arg Glu
    50                  55                  60
Val Thr Tyr Phe Ser Leu Trp Tyr Tyr Asn Lys Gln Asn Gln Arg Arg
65                  70                  75                  80
```

<210> 1462
<211> 176
<212>Amino acid
<213> Homo sapiens

<400> 1462

```
Leu Gln Pro Leu Ser Ser Trp Glu Ser Ala Ser Glu Val Thr Arg Ser
  1                 5                  10                  15
Pro Val Ser Pro Glu Asp Val Lys Gln Ala Thr Ser Asn Phe Glu Asn
            20                  25                  30
Leu Gln Lys Gln Leu Ala Arg Lys Met Lys Leu Pro Ile Phe Ile Ala
        35                  40                  45
Asp Ala Phe Thr Ala Arg Ala Phe Arg Gly Asn Pro Ala Ala Val Cys
    50                  55                  60
Leu Leu Glu Asn Glu Leu Asp Glu Asp Met His Gln Lys Ile Ala Arg
65                  70                  75                  80
Glu Met Asn Leu Ser Glu Thr Ala Phe Ile Arg Lys Leu His Pro Thr
                85                  90                  95
Asp Asn Phe Ala Gln Ser Ser Cys Phe Gly Leu Arg Trp Phe Thr Pro
            100                 105                 110
Ala Ser Glu Val Pro Leu Cys Gly His Ala Thr Leu Ala Ser Ala Ala
        115                 120                 125
Val Leu Phe His Lys Ile Lys Asn Met Asn Ser Thr Leu Thr Phe Val
    130                 135                 140
Thr Leu Ser Gly Glu Leu Arg Ala Arg Arg Ala Glu Asp Gly Ile Val
```

```
145                 150                 155                 160
Leu Asp Leu Pro Leu Tyr Pro Ala His Pro Gln Asp Phe His Glu  *
                165                 170                 175
```

<210> 1463
<211> 150
<212>Amino acid
<213> Homo sapiens

<400> 1463

```
Ala Ala Asp Thr Met Gln Ser Asp Asp Val Ile Trp Asp Thr Leu Gly
  1               5                  10                  15
Asn Lys Gln Phe Cys Ser Phe Lys Ile Arg Thr Lys Thr Gln Ser Phe
            20                  25                  30
Cys Arg Asn Glu Tyr Ser Leu Thr Gly Leu Cys Asn Arg Ser Ser Cys
        35                  40                  45
Pro Leu Ala Asn Ser Gln Tyr Ala Thr Ile Lys Glu Glu Lys Gly Gln
    50                  55                  60
Cys Tyr Leu Tyr Met Lys Val Ile Glu Arg Ala Ala Phe Pro Arg Arg
65                  70                  75                  80
Leu Trp Glu Arg Val Arg Leu Ser Lys Asn Tyr Glu Lys Ala Leu Glu
                85                  90                  95
Gln Ile Asp Glu Asn Leu Ile Tyr Trp Pro Arg Phe Ile Arg His Lys
            100                 105                 110
Cys Lys Gln Arg Phe Thr Lys Ile Thr Gln Tyr Leu Ile Arg Ile Arg
        115                 120                 125
Lys Leu Thr Leu Lys Arg Gln Arg Lys Leu Val Pro Leu Ser Lys Lys
    130                 135                 140
Val Glu Arg Arg Glu Lys
145                 150
```

<210> 1464
<211> 86
<212>Amino acid
<213> Homo sapiens

<400> 1464

```
Phe Val Glu Arg Gly Leu Gly Asp Pro Ala Leu Pro Thr Leu Met Phe
  1               5                  10                  15
Glu Glu Pro Glu Trp Ala Glu Ala Ala Pro Val Ala Ala Gly Leu Gly
            20                  25                  30
Pro Val Ile Ser Arg Pro Pro Pro Ala Ala Ser Ser Gln Asn Lys Val
        35                  40                  45
Ser Asp Ser Arg Glu Gln Trp Glu Leu Phe Gln Ala Ala Lys Arg Thr
    50                  55                  60
Leu Val Asp Pro Ser Ala Val Cys Ile Ala Gly Arg Asp Thr Cys Gly
65                  70                  75                  80
Thr Val Lys Gly Glu Ser
                85  86
```

<210> 1465
<211> 286
<212>Amino acid

<213> Homo sapiens

<400> 1465

```
Val Val Glu Phe Leu Trp Ser Arg Arg Pro Ser Gly Ser Ser Asp Pro
 1               5                  10                  15
Arg Pro Arg Arg Pro Ala Ser Lys Cys Gln Met Met Glu Glu Arg Ala
            20                  25                  30
Asn Leu Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser
        35                  40                  45
Ala Leu Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln
    50                  55                  60
Gln Phe Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val
65                  70                  75                  80
Lys Lys Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu
                85                  90                  95
Leu Val Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val
            100                 105                 110
Arg Asn Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp
        115                 120                 125
Leu Tyr Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val
    130                 135                 140
Leu Ile Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala
145                 150                 155                 160
Leu Met Met Glu Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly
                165                 170                 175
Leu Asn Val Leu Asp Ala Asn Leu Cys Leu Lys Gly Glu Asp Leu Asp
            180                 185                 190
Ser Gln Val Gly Val Ile Asp Phe Ser Leu Tyr Leu Lys Asp Val Gln
        195                 200                 205
Asp Leu Asp Gly Gly Lys Glu His Glu Arg Ile Thr Asp Val Leu Asp
    210                 215                 220
Gln Lys Asn Tyr Val Glu Glu Leu Asn Arg His Leu Ser Cys Thr Val
225                 230                 235                 240
Gly Asp Leu Gln Thr Lys Ile Asp Gly Leu Glu Lys Thr Asn Ser Lys
                245                 250                 255
Leu Gln Glu Arg Val Ser Ala Ala Thr Asp Arg Ile Cys Ser Leu Gln
            260                 265                 270
Glu Glu Gln Gln Gln Leu Arg Glu Gln Asn Glu Leu Ile Arg
        275                 280                 285 286
```

<210> 1466
<211> 127
<212>Amino acid
<213> Homo sapiens

<400> 1466

```
Gly Cys Tyr Ala Pro Ser Pro His Leu Gly Gly Ser Leu Thr Pro Arg
 1               5                  10                  15
Phe Phe Pro Asn Gly Val Phe His Arg Arg Leu Pro Arg Pro Arg Pro
            20                  25                  30
Pro Gln Pro Pro Ser Val Ser Ser Ala Pro Thr Leu Arg Pro Leu Cys
        35                  40                  45
Ala His Phe Ser Leu Gly Lys Leu Arg Leu Arg Val Arg Lys Ser Ala
    50                  55                  60
Glu Val Ala Pro Pro Arg Thr Glu Lys Gly Trp Gly Ser Ala Glu Pro
```

```
 65                  70                  75                  80
Arg His Ser Arg Ala Pro Leu Gly Leu Gln Gly Leu Arg Met Ala Ala
                85                  90                  95
Ser Ala Gln Val Ser Val Thr Phe Glu Asp Val Ala Val Thr Phe Thr
            100                 105                 110
Gln Glu Glu Trp Gly Gln Leu Asp Ala Ala Gln Arg Thr Leu Tyr
        115                 120                 125     127
```

<210> 1467
<211> 146
<212>Amino acid
<213> Homo sapiens

<400> 1467

```
Phe Arg Gly Ser Leu Ser Ser Pro Ser Ser Leu Arg Gly Arg Arg Leu
  1               5                  10                  15
Val Thr Gly Gln Thr Ser Pro Arg Gly Thr Trp Cys Leu Tyr Pro Gly
            20                  25                  30
Phe Cys Arg Ser Val Ala Cys Ala Met Pro Cys Cys Ser His Arg Ser
        35                  40                  45
Cys Arg Glu Asp Pro Gly Thr Ser Glu Ser Arg Glu Met Asp Pro Val
    50                  55                  60
Val Phe Glu Asp Val Ala Val Asn Phe Thr Gln Glu Glu Trp Thr Leu
 65                  70                  75                  80
Leu Asp Ile Ser Gln Lys Asn Leu Phe Arg Glu Val Met Leu Glu Thr
                85                  90                  95
Phe Arg Asn Leu Thr Ser Ile Gly Lys Lys Trp Ser Asp Gln Asn Ile
            100                 105                 110
Glu Tyr Glu Tyr Gln Asn Pro Arg Arg Ser Phe Arg Ser Leu Ile Glu
        115                 120                 125
Glu Lys Val Asn Glu Ile Lys Glu Asp Ser His Cys Gly Glu Thr Phe
    130                 135                 140
Thr Gln
145 146
```

<210> 1468
<211> 44
<212>Amino acid
<213> Homo sapiens

<400> 1468

```
Leu Asn Phe Ala Asn Ser Ala Ala Phe Ala Val Thr Met Pro Gln Asn
  1               5                  10                  15
Glu Tyr Ile Glu Leu His Arg Lys Arg Tyr Gly Phe Arg Leu Asp Tyr
            20                  25                  30
His Glu Lys Lys Arg Lys Lys Gln Ser Arg Glu Ala
        35                  40                  44
```

<210> 1469
<211> 198
<212>Amino acid
<213> Homo sapiens

<400> 1469

```
Ser Gly Asp Leu Ser Pro Ala Glu Leu Met Met Leu Thr Ile Gly Asp
 1               5                  10                  15
Val Ile Lys Gln Leu Ile Glu Ala His Glu Gln Gly Lys Asp Ile Asp
            20                  25                  30
Leu Asn Lys Val Lys Thr Lys Thr Ala Ala Lys Tyr Gly Leu Ser Ala
        35                  40                  45
Gln Pro Arg Leu Val Asp Ile Ile Ala Ala Val Pro Pro Gln Tyr Arg
    50                  55                  60
Lys Val Leu Met Pro Lys Leu Lys Ala Lys Pro Ile Arg Thr Ala Ser
65                  70                  75                  80
Gly Ile Ala Val Val Ala Val Met Cys Lys Pro His Arg Cys Pro His
                85                  90                  95
Ile Ser Phe Thr Gly Asn Ile Cys Val Tyr Cys Pro Gly Gly Pro Asp
            100                 105                 110
Ser Asp Phe Glu Tyr Ser Thr Gln Ser Tyr Thr Gly Tyr Glu Pro Thr
        115                 120                 125
Ser Met Arg Ala Ile Arg Ala Arg Tyr Asp Pro Phe Leu Gln Thr Arg
    130                 135                 140
His Arg Ile Glu Gln Leu Lys Gln Leu Gly His Ser Val Asp Lys Val
145                 150                 155                 160
Glu Phe Ile Glu Met Gly Gly Thr Phe Met Ala Leu Pro Glu Glu Tyr
                165                 170                 175
Arg Asp Tyr Phe Ile Arg Asn Leu His Asp Ala Leu Ser Gly His Thr
            180                 185                 190
Ser Asn Asn Ile Tyr Glu
        195             198
```

<210> 1470
<211> 178
<212>Amino acid
<213> Homo sapiens

<400> 1470

```
Trp Glu Ser Asp Val Gly Glu Gly Leu Arg Pro Pro Pro Pro Pro Pro
 1               5                  10                  15
Pro Pro Gly Arg Arg Arg Thr Gln Glu Pro Arg Ala Arg Asp Ala Ala
            20                  25                  30
Thr Val Ile Phe Ala Cys Pro Ala Ala Leu Leu Glu Thr Leu Ile Ala
        35                  40                  45
Tyr Gly Ser Ser Ser Pro Ser Phe Cys Lys His Arg Ala Ala Arg Pro
    50                  55                  60
Leu Ile Phe Leu Leu His Arg Leu Thr Ala Glu Ala Thr Ala Arg Cys
65                  70                  75                  80
Pro Ile Cys Ala Leu Glu Ala Arg Asn Pro Gly Arg Trp Gly Ile Cys
                85                  90                  95
Ala Ser Trp Pro Gly Met Lys Thr Pro Phe Gly Lys Ala Ala Ala Gly
            100                 105                 110
Gln Arg Ser Arg Thr Gly Ala Gly His Gly Ser Val Ser Val Thr Met
        115                 120                 125
Ile Lys Arg Lys Ala Ala His Lys Lys His Arg Ser Arg Pro Thr Ser
    130                 135                 140
Gln Pro Arg Gly Asn Ile Val Gly Cys Ile Ile Gln His Gly Trp Lys
145                 150                 155                 160
Asp Gly Asp Glu Pro Leu Thr Gln Trp Lys Gly Thr Val Leu Asp Gln
```

```
                165                 170                 175
Leu Leu
    178


     <210> 1471
     <211> 253
     <212>Amino acid
     <213> Homo sapiens


     <400> 1471
Arg Asp Leu Gly Val Ala Leu Glu Ala Phe Gln Trp Ala Arg Ala Gly
  1               5                  10                  15
Asp Cys Gly Ser Gly Ala Gly Arg Ala Gly Gly Glu Gly Val Asp Ala
             20                  25                  30
Gly Arg Arg Val Pro Glu Arg Gln His Arg Gly Arg Gly Gly Gly Gly
         35                  40                  45
Glu Pro Gly Arg Arg Gln Arg Gly Gly Arg Arg Gln Arg Ser Ser Ser
     50                  55                  60
Arg Arg Ser Gly Gly Asp Gly Gly Asp Glu Val Glu Gly Ser Gly Val
 65                  70                  75                  80
Gly Ala Gly Glu Gly Glu Thr Val Gln His Phe Pro Leu Ala Arg Pro
                 85                  90                  95
Lys Ser Leu Met Gln Lys Leu Gln Cys Ser Phe Gln Thr Ser Trp Leu
            100                 105                 110
Lys Asp Phe Pro Trp Leu Arg Tyr Ser Lys Asp Thr Gly Leu Met Ser
        115                 120                 125
Cys Gly Trp Cys Gln Lys Thr Pro Ala Asp Gly Gly Ser Val Asp Leu
    130                 135                 140
Pro Pro Val Gly His Asp Glu Leu Ser Arg Gly Thr Arg Asn Tyr Lys
145                 150                 155                 160
Lys Thr Leu Leu Leu Arg His His Val Ser Thr Glu His Lys Leu His
                165                 170                 175
Glu Ala Asn Ala Gln Glu Ser Glu Ile Pro Ser Glu Glu Gly Tyr Cys
            180                 185                 190
Asp Phe Asn Ser Arg Pro Asn Glu Asn Ser Tyr Cys Tyr Gln Leu Leu
        195                 200                 205
Arg Gln Leu Asn Glu Gln Arg Lys Lys Gly Ile Leu Cys Asp Val Ser
    210                 215                 220
Ile Val Val Ser Gly Lys Ile Phe Lys Ala His Lys Asn Ile Leu Val
225                 230                 235                 240
Ala Gly Ser Arg Phe Phe Lys Thr Leu Tyr Cys Phe Ser
                245                 250         253


     <210> 1472
     <211> 147
     <212>Amino acid
     <213> Homo sapiens


     <400> 1472
Ser Leu Arg Ala Ala Ala Ala Met Ala Asp Val Thr Ala Arg Ser Leu
  1               5                  10                  15
Gln Tyr Glu Tyr Lys Ala Asn Ser Asn Leu Val Leu Gln Ala Asp Arg
             20                  25                  30
Ser Leu Ile Asp Arg Thr Arg Arg Asp Glu Pro Thr Gly Glu Val Leu
```

```
         35                  40                  45
Ser Leu Val Gly Lys Leu Glu Gly Thr Arg Met Gly Asp Lys Ala Gln
     50                  55                  60
Arg Thr Lys Pro Gln Met Gln Glu Glu Arg Arg Ala Lys Arg Arg Lys
 65                  70                  75                  80
Arg Asp Glu Asp Arg His Asp Ile Asn Lys Met Lys Gly Tyr Thr Leu
                 85                  90                  95
Leu Ser Glu Gly Ile Asp Glu Met Val Gly Ile Ile Tyr Lys Pro Lys
            100                 105                 110
Thr Lys Glu Thr Arg Glu Thr Tyr Glu Val Leu Leu Ser Phe Ile Gln
        115                 120                 125
Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly Ala Ala Asp
    130                 135                 140
Glu Val Leu
145     147
```

<210> 1473
<211> 139
<212>Amino acid
<213> Homo sapiens

<400> 1473

```
Cys Asn Ser Ala Glu Ser Arg Met Asp Val Leu Phe Val Ala Ile Phe
  1               5                  10                  15
Ala Val Pro Leu Ile Leu Gly Gln Glu Tyr Glu Asp Glu Glu Arg Leu
            20                  25                  30
Gly Glu Asp Glu Tyr Tyr Gln Val Val Tyr Tyr Tyr Thr Val Thr Pro
        35                  40                  45
Ser Tyr Asp Asp Phe Ser Ala Asp Phe Thr Ile Asp Tyr Ser Ile Phe
    50                  55                  60
Glu Ser Glu Asp Arg Leu Asn Arg Leu Asp Lys Asp Ile Thr Glu Ala
65                  70                  75                  80
Ile Glu Thr Thr Ile Ser Leu Glu Thr Ala Arg Ala Asp His Pro Lys
                85                  90                  95
Pro Val Thr Val Lys Pro Val Thr Thr Glu Pro Gln Ser Pro Asp Leu
            100                 105                 110
Asn Asp Ala Val Ser Ser Leu Arg Ser Pro Ile Pro Leu Leu Leu Ser
        115                 120                 125
Cys Ala Phe Val Gln Val Gly Met Tyr Phe Met
    130                 135             139
```

<210> 1474
<211> 185
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(185)
<223> X = any amino acid or stop code

<400> 1474

```
Phe Val Arg Gly Pro Gly Glu Glu Gln Ala Pro Ala Phe Arg Lys Pro
  1               5                  10                  15
```

```
Ala Pro Gly Ala Met Gly Ala Gln Val Arg Leu Pro Pro Gly Glu Pro
                20                  25                  30
Cys Arg Glu Gly Tyr Val Leu Ser Leu Val Cys Pro Asn Ser Ser Gln
            35                  40                  45
Ala Trp Cys Glu Ile Thr Asn Val Ser Gln Leu Leu Ala Ser Pro Val
        50                  55                  60
Leu Tyr Thr Asp Leu Asn Tyr Ser Ile Asn Asn Leu Ser Ile Ser Ala
65                  70                  75                  80
Asn Val Glu Asn Lys Tyr Ser Leu Tyr Val Gly Leu Val Leu Ala Val
                85                  90                  95
Ser Ser Ser Ile Phe Ile Gly Ser Ser Phe Ile Leu Lys Lys Lys Gly
            100                 105                 110
Leu Leu Gln Leu Ala Ser Lys Gly Phe Thr Arg Ala Gly Gln Gly Gly
        115                 120                 125
His Ser Tyr Leu Lys Glu Trp Leu Trp Trp Val Gly Leu Leu Ser Ile
    130                 135                 140
Leu Ser Trp Asn Ala Arg Glu Lys Val Asp Leu Xaa Asn Ile Thr Phe
145                 150                 155                 160
Xaa Pro Gln Thr Ser Cys Ile Phe Phe Thr Ile Thr Ile Glu Lys Ser
                165                 170                 175
Thr Phe Leu Ser Tyr Phe Pro Thr Ser
            180                 185
```

<210> 1475
<211> 91
<212>Amino acid
<213> Homo sapiens

<400> 1475

```
Ala Arg Gly Ser Cys Pro Thr Arg Pro Arg Pro Ala Asn Gly Arg Met
  1               5                  10                  15
Ala Glu Thr Lys Asp Ala Ala Gln Met Leu Val Thr Phe Lys Asp Val
            20                  25                  30
Ala Val Thr Phe Thr Arg Glu Glu Trp Arg Gln Leu Asp Leu Ala Gln
        35                  40                  45
Arg Thr Leu Tyr Arg Glu Val Met Leu Glu Thr Cys Gly Leu Leu Val
    50                  55                  60
Ser Leu Gly His Arg Val Pro Lys Pro Glu Leu Val His Leu Leu Lys
65                  70                  75                  80
His Gly Gln Glu Leu Trp Ile Val Lys Arg Gly
                85                  90  91
```

<210> 1476
<211> 159
<212>Amino acid
<213> Homo sapiens

<400> 1476

```
Tyr Thr Met Leu Arg Gly Thr Met Thr Ala Trp Arg Gly Met Arg Pro
  1               5                  10                  15
Glu Val Thr Leu Ala Cys Leu Leu Leu Ala Thr Ala Gly Cys Phe Ala
            20                  25                  30
Asp Leu Asn Glu Val Pro Gln Val Thr Val Gln Pro Ala Ser Thr Val
        35                  40                  45
```

```
Gln Lys Pro Gly Gly Thr Val Ile Leu Gly Cys Val Val Glu Pro Pro
     50                  55                  60
Arg Met Asn Val Thr Trp Arg Leu Asn Gly Lys Glu Leu Asn Gly Ser
 65                  70                  75                  80
Asp Asp Ala Leu Gly Val Leu Ile Thr His Gly Thr Leu Val Ile Thr
                85                  90                  95
Ala Leu Asn Asn His Thr Val Gly Arg Tyr Gln Cys Val Ala Arg Met
            100                 105                 110
Pro Ala Gly Ala Val Ala Ser Val Pro Ala Thr Val Thr Leu Ala Ser
        115                 120                 125
Glu Ser Ala Pro Leu Pro Pro Cys His Gly Ala Val Pro Pro His Leu
    130                 135                 140
Ser His Pro Glu Ala Pro Thr Ile His Ala Ala Ser Cys Tyr Ser
145                 150                 155                 159
```

<210> 1477
<211> 139
<212>Amino acid
<213> Homo sapiens

<400> 1477

```
Trp Gly Arg Arg Arg Gln Leu Val Ser Glu Ala Ala Arg Ala Gln Gly
  1               5                  10                  15
Asp Pro Val Cys Ser Thr Met Ser Glu Glu Glu Ala Ala Gln Ile Pro
            20                  25                  30
Arg Ser Ser Val Trp Glu Gln Asp Gln Gln Asn Val Val Gln Arg Val
        35                  40                  45
Val Ala Leu Pro Leu Val Arg Ala Thr Cys Thr Ala Val Cys Asp Val
    50                  55                  60
Tyr Ser Ala Ala Lys Asp Arg His Pro Leu Leu Gly Ser Ala Cys Arg
 65                  70                  75                  80
Leu Ala Glu Asn Cys Val Cys Gly Leu Thr Thr Arg Ala Leu Asp His
                85                  90                  95
Ala Gln Pro Leu Leu Glu His Leu Gln Pro Gln Leu Ala Thr Met Asn
            100                 105                 110
Ser Leu Ala Cys Arg Gly Leu Asp Lys Leu Glu Glu Lys Leu Pro Phe
        115                 120                 125
Leu Gln Gln Pro Ser Glu Thr Val Val Thr Ser
    130                 135                 139
```

<210> 1478
<211> 331
<212>Amino acid
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(331)
<223> X = any amino acid or stop code

<400> 1478

```
Ala Lys Ala Phe Thr Met Ala Glu Ser Pro Gly Cys Cys Ser Val Trp
  1               5                  10                  15
Ala Arg Cys Leu His Cys Leu Tyr Ser Cys His Trp Arg Lys Cys Pro
```

```
                20                  25                  30
Arg Glu Arg Met Gln Thr Ser Lys Cys Asp Cys Ile Trp Phe Gly Leu
            35                  40                  45
Leu Phe Leu Thr Phe Leu Leu Ser Leu Ser Trp Leu Tyr Ile Gly Leu
    50                  55                  60
Val Leu Leu Asn Asp Leu His Asn Phe Asn Glu Phe Leu Phe Arg Arg
65                  70                  75                  80
Trp Gly His Trp Met Asp Trp Ser Leu Ala Phe Leu Leu Val Ile Ser
                85                  90                  95
Leu Leu Gly Thr Tyr Ala Ser Leu Leu Leu Val Leu Ala Leu Leu Leu
            100                 105                 110
Arg Leu Cys Arg Gln Pro Leu His Leu His Ser Leu His Lys Val Leu
        115                 120                 125
Leu Leu Leu Ile Met Leu Leu Val Ala Ala Gly Leu Val Gly Leu Asp
    130                 135                 140
Ile Gln Trp Gln Gln Glu Arg His Ser Leu Arg Val Ser Leu Gln Asp
145                 150                 155                 160
Cys Arg Xaa Leu Xaa Thr Pro Ala Val Arg Pro Xaa Glu Glu Ser Gly
                165                 170                 175
Glu Gly His Trp Arg Arg Ala His Leu Thr Ser Ser Cys Pro Gln Ala
            180                 185                 190
Thr Ala Pro Phe Leu His Ile Gly Ala Ala Ala Gly Ile Ala Leu Leu
        195                 200                 205
Ala Trp Pro Val Ala Asp Thr Phe Tyr Arg Ile His Arg Arg Glu Pro
    210                 215                 220
Lys Ile Leu Leu Leu Leu Leu Phe Phe Gly Val Val Leu Val Ile Tyr
225                 230                 235                 240
Leu Ala Pro Leu Cys Ile Ser Ser Pro Cys Ile Met Glu Pro Arg Asp
                245                 250                 255
Leu Pro Pro Lys Pro Gly Leu Val Gly His Arg Gly Ala Pro Met Leu
            260                 265                 270
Ala Pro Glu Asn Thr Leu Met Ser Leu Arg Lys Thr Ala Glu Cys Gly
        275                 280                 285
Ala Thr Val Phe Glu Thr Asp Val Met Val Ser Ser Asp Gly Val Pro
    290                 295                 300
Phe Leu Met His Asp Glu His Leu Ser Arg Thr Thr Asn Val Ala Ser
305                 310                 315                 320
Val Phe Pro Thr Arg Ile Thr Ala His Ser Ser
                325                 330 331
```